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THE MAGAZINE
OF
HORTICULTURE,
BOTANY,
AND ALL USEFUL DISCOVERIES AND IMPROVEMENTS IN
RURAL AFFAIRS.

“Je voudrais échauffer tout l'univers de mon got pour les jardins. Il me semble qu'il est impossible qu'un méchant puisse l'avoir. Il n'est point de vertus que je ne suppose à celui que aime à parler et à faire des jardins. Pères de famille, inspirez la jardinomanie à vos enfans.”—*Prince De Ligne*.

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PREFACE.

THE Sixth Volume of the Magazine is now brought to a close, and we believe that it will be found fully equal, in interest, to any that has preceded it.

The attention which has been given to new fruits, and the desire which has been felt, to procure information respecting all the new varieties, particularly of pears, has induced us to devote considerable space to that purpose, and, in the early part of the volume, will be found some very valuable papers, by Mr. Manning, Mr. Downing, and others. The introduction of new flowers, from abroad, has not been so great, within a year or two, as previously: so much disappointment has been occasioned by hasty importations of new things, that amateurs and others prefer to obtain some correct information, before they purchase at high prices: in consequence of this, there have not been so many new plants noticed, as in some of our earlier volumes. In this volume, however, we have described a great number of new seedling verbenas, camellias, and geraniums, the productions of our amateur and practical gardeners, and most of them commended as among the finest varieties which have yet been raised of these admired tribes. Our Floricultural Notices have not been as extended as usual; but they will be more complete hereafter. Among the Miscellaneous Intelligence is to be found some very valuable information.

A hearty co-operation of the friends of horticulture, throughout the country, is only needed, to render the Magazine more and more useful. The communications in the present volume, are, several of them, from new correspondents, and we hope they will continue to give us their assistance; for their kindness they will receive our thanks. Some of our old friends have not been so communicative as in former volumes, but we shall expect them to renew their acquaintance with our readers in the next. So far as our own labors are concerned, we shall endeavor to impart new interest to every volume. Let us invite every individual who appreciates the importance of one Magazine devoted to Horticulture, to come forward, and give it his hearty support.

C. M. H.

Boston, Nov. 20, 1840.

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THE MAGAZINE

OF

HORTICULTURE.

JANUARY, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *A Retrospective View of the Progress of Horticulture in the United States, during the past year.* By the EDITOR.

THE close of another season brings us to that period, when we may look back and review the progress which has been made in the science of horticulture during the past year. At the commencement of the year we had the gratification of announcing that horticulture was in a much more flourishing state than it had been the preceding year; and it was our hope that it might continue to advance, without again being so suddenly checked as it had been in 1837. But commercial affairs, upon the prosperity of which horticulture is, in a degree, dependent, have been again plunged into embarrassment, and the attention of a portion of the community drawn away from the peaceful and quiet pursuit of horticulture, to the din and bustle of the commercial world. Such embarrassments in the mercantile community affect, seriously, the interests of horticulture; and improvements which would have taken place, but for the recurrence of such a state of things, are postponed, until an opportunity shall again occur, when leisure and the pecuniary condition of society shall enable those who have engaged in the practice of horticulture, to carry out and complete that which had been long contemplated. The year opened with fair encouragement, and a rapid advancement in horticultural improvement was confidently anticipated: it has passed away, and we

have recorded much that has been accomplished. The present state of things will, we doubt not, gradually pass off without having been but a momentary check upon horticultural improvement; and if it may result in inducing individuals to enter more zealously into its pursuit; and the pursuit of the kindred science of agriculture, we shall not regret that it has been thus retarded, but regard it as a lesson to teach the community, that in the noble profession, of the cultivation of the earth, is to be found an occupation, which, however deeply commercial affairs may be depressed, will not be subject to embarrassments always attendant on such events.

The past year has been a highly favorable season for vegetation: the winter of 1838-39 was mild, without any extremes of cold, and less damage was done to trees, shrubs and plants, than for several years previous. The spring opened moderately, giving promise of a fine season, and was followed by a warm and favorable summer, without any intense heat, accompanied by frequent genial showers, and free (with one exception) from the severe storms which sometimes occur. The autumn—unusually pleasant and serene—was prolonged almost into winter; affording an opportunity for the full growth and maturity of every crop, and ample time to prepare for the severity of winter. The agricultural, as well as the horticultural, community, have reaped a rich and bounteous harvest.

With these prefatory remarks, we enter upon a notice of some of the improvements which have been effected, so far as we have had the pleasure of informing ourselves from personal inspection, and from receiving the assistance of our correspondents. We shall divide the subject as heretofore, viz:—the advancement of horticulture as an art—and the statistics of horticulture.

THE ADVANCEMENT OF HORTICULTURE AS AN ART.

Landscape Gardening.—We regret that we are not enabled to enumerate some specimens of improvement in the true sense in which the art consists. The mere embellishment of small gardens, or the planting of larger ones, does not come within its scope, and we fear it will be some time before we shall be enabled to record the existence of any good specimen in the country. It is true that much more attention is given to the laying out of gardens, and that small beds of turf are occasionally introduced, on which groups of flowers are planted; but, other than this, there has been no attempt made, that we are aware of, to introduce landscape gardening, even among the many suburban villas, which abound in the vicinity of our

large cities. It will be our effort to introduce one or two engravings in the present volume, to show the difference between the common mode of laying out grounds, and that in which landscape shall be the principal feature. If we can succeed in inducing one person to attempt the accomplishment of this object, we shall look upon it as the beginning of a new era in the progress of this department of gardening.

Arboreal culture.—The same remarks, applied to landscape gardening, may be applied to arboriculture. Very little has yet been done. Besides the planting of fruit trees, and a few smaller shrubs, and occasionally some forest trees of the first class, for the embellishment of public walks, &c., not much has been attempted. It is with pleasure, however, that we learn that the formation of an arboretum is proposed in the Harmony Grove Cemetery, at Salem. Several of the proprietors are gentlemen of wealth and taste, and we hope to see this desirable object accomplished. In the present state of gardening, individuals will not undertake such a thing, but the proprietors and directors of cemeteries may do so; and while they ornament their grounds, confer a favor to the botanical student and the public, by gathering together all the trees and shrubs which will endure our severe winters. Their relative beauty and effect in plantations may thus be seen, and to those who are about laying out villa residences, the information to be obtained from the simple inspection of a properly arranged arboretum will be of great value. We sincerely wish that the intentions of the proprietors may be completed.

Horticulture.—In horticulture we are gratified to find more attention given to the cultivation of the products of the kitchen garden. Many of the best of them have heretofore been found of only medium quality, but their growth is now an object upon which some more care and attention should be bestowed. Cauliflowers, brocolis, celery, &c., of a very superior quality, are now found in the market, in the place of those of ordinary growth. The annual exhibition of the Pennsylvania Horticultural Society displayed the greatest variety of vegetables ever seen: other horticultural societies have offered liberal premiums, and have thus induced many cultivators to make efforts to excel. Some new varieties have been introduced, and these have been recorded under their proper head.

In eastern cities we have no knowledge of any remarkable improvements; indeed, it is scarcely time to look for such: very few gardens of any size, and containing a variety of productions, yet exist. In Salem, Mr. Manning has continued to prove new varieties of pears, plums, apples, &c. We

have, in our last volume, noticed his garden, as well as the more prominent ones in that city, and shall not enlarge upon them in this. Mr. Manning has some notes on several varieties of pears, which we hope soon to lay before our readers.

In Boston and vicinity, the same steady zeal has actuated many of the possessors of gardens to add all the choice kinds of fruits to their collections. The shows of the Massachusetts Horticultural Society attest the labors of various cultivators. Some importations of trees have been made, but they have not included any varieties very superior to those previously to be found in collections. The forcing of grapes is rapidly extending, and the ready sale and the good prices which grapes command, has induced many to enter into their growth. The retarding system, attempted for the first time by Mr. Haggerston, in 1838, has been once more tested, and found to answer, fully, the desired purpose. Fruit trees in pots are more cultivated than heretofore, and in limited gardens this method will be found to answer a good object. Pine-apples continue to be grown in admirable perfection by Mr. Haggerston, at Mr. Cushing's, and some superior fruits have been cut the past season. Very few seedling fruits, of any note, that we are aware of, excepting the new strawberry raised by ourselves, have been brought into notice the past year.

In Providence there is a better spirit manifested upon the subject of horticulture; the existing state of things we have recorded in our past volume, from a personal inspection of several of the principal gardens. Capt. B. W. Comstock has commenced a plantation of pears, apples, plums, &c., embracing many of the finest varieties, and will soon have an abundance of fruit. Very few gardens, however, can enumerate any great assortment of fruit, and the introduction of the newer and more select varieties may be considered as just commenced. At Stonington, Conn., Mr. Phelps is making improvements, as noticed in our last volume.

New York and vicinity, by the aid of two new societies, has accomplished much more than in previous years. The Horticultural Association of the Valley of the Hudson has held two exhibitions, one in New York, and one in Albany; and the Brooklyn Horticultural Society has also held two or three exhibitions, and by the display of fruits, &c., has extended a taste for horticulture. In Brooklyn there has been a great deal of attention given to horticulture, and many very fine gardens exist there. At Newburgh and Albany, on the Hudson, there has been an increasing taste for fine fruits; and through the extensive nursery of our correspondents, Messrs.

C. & A. J. Downing, of the former place, have been disseminated a great number of those kinds to be found in private gardens. Their collection is select and choice, and the correspondence of Messrs. Downing with Mr. Manning, and other cultivators in the vicinity of Boston, has enabled them to procure all the varieties which abound in our gardens. The Albany nursery also contains a fine collection of fruits. At Rochester many improvements are in contemplation; but we have no accurate knowledge of any individual collection of fruits. Growing grapes under glass, or forcing vegetables, has not yet, we believe, been introduced to any extent. At Buffalo there has been some improvements, which have been noticed in the pages of the past volume. Other towns in the western part of New York are slowly becoming acquainted with the newer fruits and vegetables, which will soon effect an improvement in their gardening.

In New Jersey there is but little to claim a notice. With the exception of Burlington and Princeton, we think that horticulture can scarcely be said to be practised to any extent whatever, other than what may consist in the cultivation of large peach and apple orchards, and immense crops of melons. Horticulture, like the agriculture of New Jersey, does not flourish with much success. The soil and climate are favorable to the practice of each, and information and example are only wanting to induce the farmers to attain to the same excellence which characterizes the agriculture of her sister states. At Princeton, R. S. Field, Esq., has a very handsome garden, and has introduced many improvements. In Burlington, through the exertions of a few gentlemen, considerable has been accomplished. Mr. Hancock has introduced many fine fruits to his nursery, and is continually adding to his stock the best varieties. We have noticed his nursery, as well as all the principal private gardens which at present exist, and their good keeping and general appearance is highly creditable. Superior vegetables are grown by the gardeners of Messrs. Binney and Chauncey, and their productions, exhibited before the Pennsylvania Horticultural Society, have gained premiums.

Philadelphia, though progressing rapidly in floriculture, has not effected many improvements in this branch of gardening. The cultivation of vegetables is carried to a high degree of perfection, and the fruits are handsomely grown; but the introduction of the newer sorts has been less attended to than in Boston or New York. The forcing of grapes has been commenced on a scale of great magnitude by Mr. Biddle, and we believe

the crop the past year was very large: other gentlemen are adding to their gardens, houses for the cultivation of grapes and other fruits. The Pennsylvania Horticultural Society continues in a very flourishing state, and the last exhibition was the most splendid ever got up in the city, and was attended by an immense number of visitors. Its monthly meetings have been interesting, as will be seen by a reference to the reports in the pages of the past volume.

The citizens of Baltimore appear to be awakening upon the subject of horticulture. Though favored with an elevated situation, a good soil, and a climate superior, in some respects, to the northern and eastern cities, very little has yet been attempted in the formation of gardens, the introduction of choice fruits, or the construction of forcing houses. The market is bountifully supplied with excellent vegetable productions, and with a great quantity of the more common fruits: there is, however, but little of that zeal exhibited, in the growth of new fruits, which exists among cultivators in Boston and vicinity. Commercial affairs engross the attention of the citizens, and it will be some time before much superfluous wealth will be lavished upon the formation of gardens. The nursery of R. Sinclair, Sen., is of some extent, and contains a very good assortment of fruits.

In Washington, there has been more exertion made the past year, and the exhibitions of the Columbian Horticultural Society have been much better attended than the year previous. Some good gardens exist there, and in the immediate vicinity. From Charleston, (S. C.) we have no information of any importance, and refer to the report of the horticultural society, in the last volume, to learn the state of gardening. In Augusta, and other southern cities, and in the west, horticultural taste is increasing, but it is impossible for us to offer any particular information upon the subject.

The introduction of new fruit has been less the past year than in 1838. Some few varieties have been grown from seed, and these will be enumerated in our pomological reports. Mr. S. Feast, of Baltimore, has raised from seed of the Seckel, a fine pear. In Montreal, Mr. Corse, the grower of the *Nota Bene* plum, has fruited a few apples and plums, of great excellence, and has a large number of seedling trees, which will come into bloom next year. The Rohan potato has caused much excitement among both agriculturists and horticulturists; it has proved to be a most important vegetable, and well worth cultivation by every one who is desirous of possessing such a remarkable variety. Mr. Corse has likewise raised a new potato,

which he thinks will prove very valuable: he has kindly promised to send us a specimen for trial. Mr. Hancock, of Burlington, N. J. has raised a seedling potato, which he thinks very valuable; and a new kind, called the Pollard, after the name of the grower, has been introduced to notice, the past year, for the first time: no potato surpasses it in quality.

Floriculture.—This branch of gardening receives more attention than horticulture. Almost every cottage has its flower garden, and often, when there is scarcely a tree to be found in some gardens, they will contain beds of choice and rare flowers. The planting of a collection of fruit trees is a work of time, requiring much attention, while the flower garden is but of annual duration, and can be renewed or not, at pleasure. The introduction of rare plants has fallen off since 1837 and 38, and but a limited number were imported the past year. New seedling plants, however, of American growth, have rapidly increased, and our catalogues will soon enumerate many varieties of some families, particularly of verbenas, and camellias. Many new seedlings, of each of these tribes, have been noticed in the past volume. Some seedling dahlias have been raised, which equal the best productions of the English florists. Attention seems to be turned rather to improving and cultivating plants already introduced, than to the addition of new varieties which possess no attraction other than a name. The tribe of *Cacti* appears to be winning its way into favor here, as it has done in England, and some fine collections now exist.

Boston and vicinity have made considerable improvements in floriculture. The establishment of the public garden, and, in connection, the Conservatory, has had a good tendency to diffuse a taste for plants: when the garden shall be completed, though we think the plan is by no means a good one, it will afford an agreeable and convenient place for strangers to get some idea of the progress of gardening. We intend to make some observations upon the garden, with an account of the Conservatory and the number and variety of the plants in the collection. Some fine seedling geraniums, camellias, pansies, &c., have been raised in this vicinity, and the latter flower has been more generally cultivated than heretofore. We hope to see it find its way into the garden of every amateur. Mr. Wales, of Dorchester, whose visit to London we have noticed, has imported a variety of plants, but we have not had the opportunity to ascertain what they were. The dahlias flowered exceedingly well the past autumn, and the shows, particularly the one at the public garden, were very splendid. The result of the past summer's experience has shown, we think, conclusively,

that the causes which prevented a better bloom in the season of 1838, were wholly beyond control, and that it is only in summers of moderate temperature that we can depend upon a successful growth of the dahlia. We cannot attribute the ill success of cultivators, in 1838, to any thing but the intense and burning heat of the summer months. Water administered in profusion, both over the foliage with a syringe, and at the roots, will somewhat counteract the excess of heat; but no care will enable the cultivator to procure satisfactory results in such seasons. Among the more rare flowers which have expanded their blossoms in our collections, for the first time, may be mentioned the *Strelitzia augusta* and *Gloriosa superba*. A collection of orchideous plants has been received from South America by the public garden, and the plants are now under the care of Mr. Donald.

In Brooklyn, N. Y., Mr. Perry has been adding extensively to his collection: a large palm house has been erected for plants, of the handsomest species to be procured, and the height is such as to allow them to attain to something like their true stature. Mr. Becar's collection of camellias has been augmented by the addition of many fine new kinds. In New York city, there has not so much been done as in Brooklyn. Mr. Boll has given up the cultivation of plants, and has entered wholly into the growth of the *Morus multicaulis*. Mr. Dunlap has raised some choice camellias, which will be described in the Magazine. Mr. Hogg has continued to add to his nursery, and he has raised several very beautiful verbenas: he has also grown several handsome yellow roses. Mr. Thorburn's display of dahlias was very splendid the past autumn. In Rochester, our friends inform us that floricultural improvement has been considerable the past year. Several private residences are contemplated, with fine gardens to be attached. Ellwanger & Rogers, nurserymen, have purchased a new spot of land near the new cemetery, and intend to remove there in the coming spring. Their collection of plants is yet limited, but of some tribes they have a pretty good collection, viz., such as geraniums, roses, camellias, cactuses, &c.; of the latter a large number. Our correspondent, Mr. Bateham, has made a visit to England, and has brought out with him a fine variety of seeds.

In Princeton, N. J., Mr. R. S. Field has introduced the method of planting circular beds, on grass lawns, as described in our last volume, p. 131, from Loudon's *Suburban Gardener*. The effect has been highly pleasing, and the plan is worthy of imitation. We only regret that we were unable, in our late

visit, to have the opportunity of seeing Mr. Field's improvements ourselves.

Philadelphia has done more in floriculture than either of her sister cities. The general desire to possess new plants has continued to increase, and the nurserymen and florists of the city have been busily engaged in supplying the demand. Mr. Buist has made a tour to England and on the continent, and has brought home a variety of new plants: he has also raised some new verbenas, which have been handsome additions to the garden. Mackenzie & Buchanan's new verbenas, which have been described in our last volume, have been generally sought after and admired. The exclusive cultivation of the *Morus multicaulis* has occupied the attention of some of the nurserymen in this city, to the injury, we fear, of their regular business. Messrs. Hirst & Dreer, seedsmen, have commenced improvements in their nursery, and intend to erect new green-houses, &c.; their collection of dahlias was the largest and finest in the city the past year. Mr. J. B. Smith has reduced his collection of plants by public sale.

In Baltimore and Washington more has been accomplished than last year, though the improvements have been limited. Messrs. Feast, of the former city, have been augmenting their collections, and have many seedling plants. Mr. S. Feast has been very fortunate in raising some fine varieties of verbenas. He has also raised a great number of seedling camellias, roses, and azaleas, and among the latter there is a diversity of colors: some of the camellias that have flowered possess much merit. The amateur collections in the city contain a large number of seedling camellias; but we must refer to our observations upon the gardens of the city, in our last volume, for particulars. In Washington, Mr. William Buist and J. Douglas, Jr. are among those who have done much to advance a taste for horticultural pursuits. Dr. Gunnell, a zealous amateur, has raised many seedling camellias, some of which have been described in our pages. The reports of the exhibitions of the Columbian Horticultural Society, which we have already given, will show the general state of things in this city.

At Pittsburg, Pa., C. F. Spang, Esq., has one of the most extensive collections of Cacti in the country, embracing many unnamed and undescribed species from South America.

STATISTICS OF HORTICULTURE.

The information under this head, relates to the formation and laying out of new gardens, &c., the construction of green-houses, hot-houses, &c.

Cemeteries.—It is but a few years since the Massachusetts Horticultural Society purchased the spot of ground, known as Mount Auburn, and commenced laying it out as a cemetery, to be consecrated to the burial of the dead. The celebrated cemetery of Pere la Chaise, near Paris, seems to have suggested this improvement; and the design was immediately carried into effect. It was the first cemetery in the country, and, for two or three years, remained the only one. But others then were established, and at this time there are under contemplation, or have been laid out, at least ten. The beauty of Mount Auburn has attracted visitors from all parts of the country, and its shady avenues and unbrageous and secluded groves form a peaceful retreat for those who love to stray away from the busy commotion of city life, and tread its solitary paths, in contemplation.

Among the number contemplated, the cemeteries of Salem, Mass., New York and Rochester, N. Y., have been commenced; and, by the kindness of our friends, we are enabled to give some account of the first and last of these.

An association of gentlemen in Salem have recently purchased a tract of land, containing about thirty-five acres, and located on the borders of the North River, about one mile from the centre of the city. The city council have made an appropriation in favor of this object, and they will probably apply to the legislature, this winter, for an act of incorporation, under the name of "Harmony Grove Cemetery," and be prepared for the sale of lots in the ensuing spring.

The land has been surveyed; a rustic stone gate-way is completed. This is intended to be covered with creepers and other plants, which will contribute much to its beauty and design: the foundation for a gardener's cottage is laid; the avenues and paths are staked out; an experienced gardener and forester has been engaged as the superintendent, who has been employed in planting forest and other ornamental trees, &c.

The grounds are admirably adapted for forming a beautiful spot. The varied soil and aspect are favorable to the culture and growth of the different kinds of trees and shrubs. The highland, which is about one hundred and ten feet above the level of high water mark, affords an extensive prospect; on one side you see the thriving village of South Danvers—on the other, the city opens to the view with its harbor studded with islands, and whitened with the sails of the outward and homeward bound merchantmen; also are to be seen the neat and comely village of Beverly, and the spires of the churches in Marblehead: if an observatory should be erected about thir-

ty feet in height, the beauty of the prospect would be greatly enhanced. The interval between the serpentine river, that forms its western, or rather its south-western boundary, and the highland, is very undulated, comprising several gravelly knolls, covered, for the most part, with a thrifty growth of forest trees. Here one can find retirement, and be entirely excluded from the noise and bustle of the world. There are several rough and craggy rocks, protruding themselves from the sides of this highland, about which are scattered some moss grown apple and other trees, shrubs, &c., and in the opening spring are covered with the white flowers of the early saxifrage, whilst the intermediate patches of green verdure are dotted with the yellow blossoms of the crowfoot and dandelion, thus adding much to the beauty of the place: the wood anemone and the little hepatica are here to be found, expanding their tiny petals, telling us that "the winter is past, and the time of the singing of birds is come."

There is, at present, a goodly collection of the hard woods, comprising several species of oaks and walnuts, maples, ash, hornbeam, locust, &c., making, in all, about twenty different species. The oaks, walnuts, and locusts, however, predominate. Of the cone-bearing trees, there are none, excepting, perhaps, a few little saplings, just peeping from the ground. The past fall, however, about one hundred and fifty trees, consisting principally of the white pine, with a few hemlocks and cedars, have been set out in the lawn near the entrance; they were taken from the forest, with a large ball of earth attached to the roots: this plan has been often successful.

The spot selected by the authorities of the city of Rochester, for a burial place, is called "Mount Hope Cemetery." It is on the south line of the city, and contains about fifty acres: it is most beautiful and picturesque. It has been said by persons who have visited both places, that the scenery of Mount Hope is more bold and magnificent, than that of the celebrated Mount Auburn. If the citizens of Rochester will consider themselves as giving a direction to public taste, in this particular, and will be as liberal as nature has been, it can be made one of the grandest places of the kind in the world. The trees are in that irregular manner in which nature has placed them in forest scenery. It affords every variety of soil and elevation which trees, shrubs and plants require. The plants of almost every climate may here find a suitable home, and, being already clothed with almost every variety of trees, shrubs and plants, indigenous to this part of the country, it is really interesting to the botanist. Few spots can be found with so much

variety in so small a space; and its abrupt declivities, deeply shaded valleys, towering heights, natural arbors, narrow ridges, and deep ravines, make it truly romantic; and from its summit the prospect is enchanting. At its base, on the west, runs the smooth waters of the Genesee; on the north, the city stands out in full view, and on a clear day the blue waters of Lake Ontario; and all around lies one of the richest countries in the world. A few families have united together, and taken one of the highest hills. This spot is already laid out with straight and serpentine walks, bordered with turf and otherwise ornamented; but it might be very much improved by a proper selection of grasses, and choice exotics and other plants.

The Greenwood Cemetery, on Long Island, about two and a half miles from the city of New York, has been the subject of much notice by the New York papers, and glowing eulogies have been bestowed upon its natural capacities for the formation of a cemetery. We had intended visiting the spot ourselves when in the city, but have hitherto not found an opportunity. The spot embraces upwards of two hundred acres of land, well wooded, affording magnificent views of the surrounding country, the East River, and the harbor of New York. The whole has been laid out under the direction of B. D. Douglass, a gentleman well qualified to do justice to the situation. Lots are now for sale, and burials will probably be made there the present year.

We have thus occupied considerable space on this subject, as it is one of much interest; sooner or later they will lead to the establishment of private residences in their vicinity; and the effect of cemeteries near large cities is to improve the taste of the inhabitants, and induce them to engage in rural pursuits.

Public Gardens.—We have nothing new to notice, under this head, other than to remark that the public garden projected in Boston, in 1836, has been carried into operation the past season. The garden contains about twenty acres, and part of it has been laid out. The Conservatory attached, is of large dimensions, and is filled with plants. The number of visitors the past year have been as large as could have been expected. A liberal encouragement, from the wealthy citizens of the city, is only wanting to render it a flourishing and influential agent in advancing a taste for plants and flowers.

Private Gardens.—There have been many more new gardens laid out, and green-houses and other garden structures erected, than in 1838. Mr. J. F. Allen, of Salem, has built a grapery and peach-house. Mr. Sweetser has removed to Woburn, near Boston, where he intends laying out a pleasure

ground and fruit and flower garden. The grounds embrace eight or ten acres of good land. The dwelling and greenhouse have been erected the past autumn, and the grounds will be laid out the coming spring. The situation is pleasant, and its natural capacities favorable to the formation of a handsome residence. T. Lee, Esq., has enlarged, and otherwise improved his greenhouse. At Stonington, Conn., C. S. Phelps, Esq., has erected a grapery one hundred feet long. In Brooklyn, N. Y., J. A. Perry, Esq., has completed a range of glass about two hundred feet long, the centre apartment of which is a palm house, twenty six feet high. In Philadelphia, some new houses have been erected, but we have not the names of the proprietors.

Commercial or Nursery Gardens.—Commercial gardening, though in a flourishing condition in the early part of the season, has fallen off considerably at the present time. This is to be attributed to the cause we have previously mentioned. The cultivation of the *Morus multicaulis*, and other superior kinds of mulberries, has been zealously pursued by many nurserymen, as well as by thousands of individuals, in all parts of the country, with the expectation of realizing great profits from the sale of the trees in the coming spring. But the embarrassed state of affairs, combined with some other causes, has depressed the prices of trees, as well as the zeal of the growers, and, for the present, they are not in much demand. We are no advocates for speculation, but in our view of the subject, the higher prices which trees command, the greater will be the extension of the cultivation of the mulberry, until the country shall be filled with them in sufficient quantity to feed numerous colonies of worms. A reduction in prices will then take place, and when they will not bring as much as their intrinsic worth, for the purpose of feeding worms, the attention of the mere growers of trees will be turned towards devising methods to feed the worms and produce the silk. We have no doubt but that the production of silk, as a staple commodity, is permanently established, and that a few years will find this country so far advanced in the enterprise, as to supply the demand for home consumption, and leave a surplus for exportation. We have thus alluded to this subject, as it is one which, we think, is deserving the serious attention of the whole community. The very idea that this country can ever become a silk growing nation, is laughed at, and ridiculed, by those who never saw a mulberry tree, and many have been deterred from taking hold of the business by the advice of those who entertain such opinions. But thanks to American perseverance and enterprise, mere assertions have

no weight, and those who now say so much to prevent farmers and others, from entering at once into the growth of the *Morus multicaulis* and the rearing of silk-worms, will soon find that they remain alone in their ignorance, and will be left to wonder that the mass of the community were so much wiser than they were.

Messrs. Mason, at their garden at East Boston, have added a new grapery the past year, and they intend to erect another the present year. They have removed from the Charlestown Vineyard. The nurseries of Messrs. Kenrick and Winship are in a flourishing state, and supplied with a variety of trees and shrubs. Mr. Manning, of Salem, offers a fine collection of pears, correctly named, and confidence may be placed upon his selection of kinds, when it is desired.

Mr. Hogg, of New York, has removed his nursery from the city to Yorkville, where he has a fine spot of ground. Mr. Boll has given up the trade from ill health. At Newburgh, N. Y., Messrs. Downing are constantly adding to their nursery.

In Philadelphia, Messrs. Mackenzie and Buchanan have put up a new house, eighty feet long, making the third range of about eighty feet each. They have also increased their stock of plants. Messrs. Hirst & Dreer have taken the place known as the Woodlands, near the city, and have erected a greenhouse, and made other improvements. Mr. Buist has made some alterations and additions to his garden.

Mr. J. Feast, of Baltimore, has purchased a small spot of land, in the rear of his garden, and has erected another greenhouse the past fall. Dr. Edmonson has partly rebuilt and improved his green-house and camellia house. Mr. S. Feast has erected a new store upon his old garden spot, in Lexington street, and will open it the ensuing spring, for the sale of seeds, flowers, trees, &c. In Columbus, Ohio, Mr. J. C. Hull has commenced a nursery, flower, and vegetable garden. In Pittsburg, Pa., Messrs. Wardrop & Co. have established a nursery, and have introduced many fine varieties of fruits.

In giving these general results of what has been accomplished, it is impossible to name only some of the more conspicuous improvements. Many amateurs have added to their collections, and otherwise embellished their gardens; and where we have had the gratification of inspecting them, they have been noticed in our pages. In taking leave of the subject, we would invite all, who feel interested in horticulture and the diffusion of useful information, to send us an account of their improvements, that we may be enabled to lay before our readers all that may be effected in gardening.

ART. II. *Observations on the formation of Rock-work in Gardens.* By the EDITOR.

IN our last volume we have offered several articles upon the introduction of masses of flowers, of circular, oval, and other various forms, upon grass lawns; and of the use of vases, both as ornaments to the open parterre and the conservatory; with these we have annexed engravings, to illustrate what we have endeavored to impress upon the minds of those who are desirous of improving their gardens.

Rock-work—or what is called such—is often attempted in gardens, and generally with but ill success; for there is no species of garden ornament which can be introduced, which requires so much skill and taste to be displayed, to render it a natural and agreeable object. Rock-work, in the gardening of this country, exists only in the name; for we are not aware of the existence of any specimen which may be considered as entitled to that appellation. Heaps of stones are frequently seen in the smallest gardens, formed from the collected fragments, which may be gathered from the ground, and which are thrown together, then covered partially with soil, with a few common plants growing in the crevices; but they are seldom other than childish imitations, from their diminutive size—or ludicrous, from the unnatural manner in which they are grouped together; in the end being nothing but heaps of stones. If it is at all desirable to possess a specimen of rock-work, which shall be taken for such as might naturally exist, it must be attempted on a more extensive scale than heretofore, and by those only who have some taste for natural scenery of this description: otherwise the attempt will fail to accomplish the effect intended.

We shall not suppose that there are many amateurs, or possessors of villa residences, who will attempt the erection of rock-work, but there may be some who may wish to do so; and, as our correspondent, Mr. A. J. Downing, has sent us the annexed design, for something of the kind, we shall endeavor to lay down some directions, which may serve as a guide to their construction.

Rock-work should never be erected on dug ground, nor in perfectly open and conspicuous places in the flower garden; but in every case should be in such a situation as to be shut out

from general view, by the aid of trees, so that the spectator may come upon it suddenly, and without having his mind occupied with but one object: it will then, if properly executed, present the appearance of a natural ridge of rock, with its prominences and recesses, all studded over with mosses and flowers, luxuriating in growth, as if the situation had been their natural habitat for years. Some of the specimens of rock-work in English gardens are on a most extensive scale. At Syon House, the residence of the Duke of Northumberland, hundreds of tons of stones were used in the formation of the rock-work, which is constructed of such magnitude as to lead the spectator to imagine himself in a highland glen, rather than in the pleasure grounds of an English residence. At Hoole House, the seat of Lady Broughton, the rock-work is made to imitate the glaciers of Switzerland, with a valley between, extending to the height of sixty or seventy feet. It is not expected that any thing so magnificent will be attempted in our gardens; but rock-work, even of smaller dimensions, may be rendered a great addition to the scenery of villa residences.

When rock-work is to be formed on a level surface, where there are no appearances which will indicate a rocky or stony soil, the preparatory arrangements, to the erection of the whole, should be executed with great care, and should commence at some distance from the main ledge. It should not be divided, unless on a large scale, neither should it be executed with common land stones, bricks, &c.; but it should be formed of granite slate, stone, or common rocks, and some of the more prominent and jutting pieces should be of very large size, and placed in such a manner as to represent the stratified appearance which is generally observed in natural ledges of rock. Care should also be taken to place the same kinds of rocks together, and not mix them up promiscuously.

Commence, first, at a few yards distant, by sinking a few stones in the soil; these should be covered with turf, and a few of them with lichens and moss only; somewhat nearer a few may project above the turf, partly covered with turf; and, nearer still, rocks of large size may jut out preparatory to the commencement of the foundation of the main structure. The whole should then be completed according to the taste of the executor; for no definite rules can be laid down, by which he can be guided, as it is not a mere mechanical operation. If it is intended for the growth of early annuals, the sloping side should face to the south, and the abrupt side to the north. If, on the contrary, it is intended to grow a miscellaneous collection of

perennials and alpine plants, it should be constructed the reverse of this. Mr. Downing's design below (fig. 1,) will convey the idea of what the work should be when finished.

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There are a large number of plants, which flourish better on rock-work than in any other situation in the garden, and some cannot be made to bloom well in any other situation. Many annuals produce their flowers in greater profusion, so placed, than when growing in the dug borders. We shall name several kinds, which are best suited, by their habits, for planting on rock-work, and which are the most ornamental for that purpose.

Annuals.—Many annual plants are well adapted to rock-work, and, when intermixed with perennials, give a liveliness, by their brilliant colors, to the whole. The following are suitable for this purpose:—*Petunias* of all the varieties, *Clarkia pulchella* and *p. alba*, *Nemophila insignis*, sweet alyssum, *mignonette*, *Silene compacta*, *Iberis coronaria*, common heartsease, and the large flowering varieties; *Chryseis crocea* and *californica*, *Nolana antriplicifolia*, *Leptosiphon densiflorus* and *androsaceus*, *Collinsia bicolor*, *Gilia tricolor*, *Phlox Drummondii*, &c.

Hardy perennials.—The lower growing kinds are to be preferred, except when the rock-work is on an extensive scale, and then the taller ones may be added, viz:—*Achillea montana*, *Alyssum saxatile*, *Epigæa repens*, *Aquilegia siberica* and *canadensis*, *Campánula carpatica*, *grandiflora* and *rotundifolia*, *Phlox repens* and *divaricata*, *Diáanthus montanus*, *Geranium sanguineum*, *Tormentilla reptans pleno*, *Potentilla formosa*, *Saxifraga aizoides*, *Sedum anglicum*, *Verónica spicata* var. *pumila*, *Valeriana saxatilis*, the prickly pear and house-leek, several of our native violas, orchises, cypripediums,

asters, &c., with many of the handsome mosses and lichens.

In addition to these, all the verbenas may be annually introduced with fine effect; *Portulaca Gilliesii* and *grandiflora* are also showy plants; but the taste of the amateur or possessor of rock-work, from this list, which might be much augmented, will be enabled to form a collection, which will at all times, throughout the growing season, present a succession of flowers.

The soil in the recesses of the rocks, where the plants are to be set out, should be prepared for the different species; some requiring heath soil, and others that of a loamy nature; while some will need a mixture of the two, and others, again, scarcely any thing but sand. But we trust we have thrown out such hints, as will enable the artistical amateur, who may attempt the erection of rock-work, to produce something which will be one of the most agreeable ornaments of the garden.

ART. III. *Account of an old native variety of Pear, growing in Chelmsford, Middlesex Co., Mass.* By JOHN LEWIS RUSSELL, Prof. of Bot. &c. to the Mass. Hort. Soc., and member of the Middlesex Hort. Soc.; with *Remarks upon the same*, by R. MANNING, Esq., Pomological Garden, Salem.

PERHAPS no greater nor more efficient aid can be rendered to the cause of horticulture, under its present condition, than to obtain, from authentic and unquestioned sources, the history of fruits oftentimes known under a numerous and confused nomenclature. The existence of a very old and valuable variety of pear, in this vicinity, I have accordingly traced to its origin; partly to gratify the laudable curiosity of a friend, and partly to add my mite to the general contribution of pomological science.

The Chelmsford pear is an autumnal fruit of second rate character, ordinarily a great bearer, and accordingly valuable for the table, or for market. It is known under three names, viz. Chelmsford, Tyngsboro', and Mogul Summer. The first should be considered its legal and appropriate one. The second obtains, probably, from its having been grown in that town; and the last was given by John Kenrick, Esq., the fath-

er of Mr. William Kenrick, well known as a nurseryman and pomologist.

The venerable relic of the original tree is yet standing on the farm of Mr. Zaccheus Wright, in the southern part of the town of Chelmsford. A mere thin shell of the once extraordinary trunk yet bears a few scraggy branches, and from its roots are four thrifty suckers, all of which are identical in fruit with the trunk. Before the destructive gale of September, 1816, it was a very large tree, but being much injured by that tornado, it has rapidly declined to its present shattered and half dead condition. The fruit is, however, generally cultivated in the neighborhood, and on an adjacent farm are some large and fine trees of this variety.

Family tradition gives its history as follows:—

The great-grandmother of the present owner brought the original tree in her hand, during a journey on horseback from Braintree, Mass. It was then a mere twig, or seedling. This lady, with a zeal worthy of imitation in those days, caused it to be planted in a low, rich and moist spot, where it grew with great vigor, and was destined to be an enduring monument of her fame. The homestead has been in the possession of the family ever since, and the old pear tree has become an heirloom of no insignificant value. Its grateful fruit has spread by the graft and sucker for many a mile around; and the writer deems it no trifling distinction, thus to make an humble record of one who has given to posterity the Chelmsford pear.

J. L. R.

Remarks by Mr. Manning.—The Chelmsford pear, noticed in the above communication, is of the largest size among pears, and extremely productive. For many years past, I have been trying to trace its origin. Having been told that a dwarf tree from France had produced similar fruit, I have year after year searched the European pomological works for a description of this pear under some other name, and have imported trees of most of those pears which were described as uncommonly large, and which ripened at the same period. Finding my researches were not attended with the desired success, I concluded that the information I had received, of its importation from France, was erroneous, and that its origin must be sought after in this country. On my mentioning the subject to Mr. Russell, he kindly offered his assistance in the investigation. The result is most satisfactory, and I shall prize the fruit more highly, as I can now cultivate it under an authentic name.—*Yours, R. Manning, Salem, Dec. 1839.*

ART. IV. *On the Cultivation of Celery.*

By J. W. RUSSELL.

As good celery is always sure to meet with a ready sale in the market, and commands a liberal price when found there, I propose giving a few practical remarks on the necessary treatment required, from the first sowing of the seed in the spring, to the taking up of the roots, in the autumn, for use. In the first place, be it remembered, that the writer of this does not claim any greater knowledge than that possessed by gardeners and others, who have had experience in the cultivation of celery; but as this article may meet the eye of those persons who have not acquired the requisite knowledge, to grow it to perfection, it is probable that they may glean something from it, that may be of some assistance to them.

There are six or eight varieties of celery cultivated, and all those who cultivate it, have their favorite kinds; nevertheless, I will venture to recommend the white solid, and the rose colored solid celery, to be grown, either for the market or for private family use. The second week in April, if there is a cucumber frame at work, prepare two or three shallow boxes, and fill them with fine rich soil, and sow the seed on the surface, with a liberal hand; then press it down pretty *solid*, with a piece of board, and cover it, lightly, with very fine sifted earth; this done, give the whole a gentle watering, and place the boxes in the frame, close to the front.

When the plants make their appearance, give them air every day, if possible, by propping up the sash, at the front, where the boxes are placed. As soon as it is perceived that the plants have the least tendency to grow up weak, they must be removed from the frame, immediately to the *open air*, choosing some well sheltered spot. On the approach of foul weather they may be removed to some place under cover, and taken out again after the unfavorable weather is over. If no frame, as spoken of, be at hand, sow the seed on a rich moist piece of ground, the last week in April, in a sheltered situation: the ground must be well enriched for this purpose, and the older the manure is, the better. Dig it over, and rake the surface very fine and even; then sow the seed pretty thick, on the surface, and with a clean spade beat it *lightly* down, nice and even, and cover it over, about a quarter of an inch, with fine soil.

As soon as the plants are about two inches high, they should be transplanted into a nursery bed—but, previous to this, the ground must be well manured and dug over; then lay a board on the ground, in order to stand upon, and set the plants out in regular order, at least three inches apart, plant from plant. Some may think this†ast process too much trouble; but I can assure all who have such an idea that it is a process indispensably necessary, and the utility of it will be presently seen. When the plants are taken up from the seed bed, before proceeding to transplant them, do not neglect to rub off all the side shoots, which, it will be seen, are just making their appearance around the base of the plants, and cut off the ends of the roots, if it is desired to produce first rate celery.

About the first or second week of July the plants will be ready for the final planting out—their strong, robust appearance, by this time, I imagine, will give great encouragement to the grower, to go on and end the good work: but, on the contrary, if the plants had not been removed from the seed bed, as before advised, what a miserable appearance would they now make; so much so, that the stems being too weak to bear up the tops, now that they stand singly, they would lie flat upon the ground. When this is the case, the remedy is, to cut off the tops, and leave three or four naked stems sticking up—a disgrace to any person who has the least pretensions to its cultivation. The plants being so weak, it will be found necessary to shade them from the sun, through the middle of the day, for some time, until nature has made a fresh effort, and the plants start to grow: not so with those that have been transplanted; for by removing them with a trowel, on a damp day, they will scarcely feel the change. This is the gain,—for whilst the others will require shading and nursing, these will be making a rapid growth; and however well the former plants are nursed, it is rare that they ever make such good heads as those that receive no check.

If the cultivator has a peat meadow, that is at *no time* overflowed with water, he will find it the best situation of any, for the growth of celery; but as there are but few, comparatively speaking, who have such facilities, the next best location would be where the soil is deep and moist, with the sub-soil clay. One sure guide to go by is, always to prefer deep moist soil, whatever the sub-soil may be; for it matters not, however rich the ground is made with manure; if there is a deficiency of moisture, the growth will be stunted.

In preparing the trenches for the final planting, if the soil is deep, dig it out to the depth of eighteen inches by fifteen inch-

es in width; and the length as far as is thought proper for the number of plants; six inches of the trench must be filled up with the best *old* rotted manure that can be procured; as long strawy litter is not suitable, it should never be used. After the manure has been thrown into the trench, it should be dug over, in order to mix the soil at the bottom of the trench, thoroughly with it; this done, cut a little of the soil from each side of the trench, for the purpose of covering it about an inch, and it will then be ready for the plants, which should be set out six or eight inches apart, in a straight line, down the centre.

Keep the celery free from weeds, and earth a little, at different times, until the trench is nearly filled up; then earth it up *no more*, until it is done for the *last time*, which should be the first or second week of September, or sooner, if necessary. I have two reasons for following this process. The first is, that the roots of the plants are already covered as much as they ought to be, if we suppose the sun and air has any effect on them, or is of any benefit to them. My second reason is, that the celery will make a stronger growth, and will be very much superior, both in size and quality, to that which is earthed up every week or ten days, as is generally done. Good celery ought to be solid, thoroughly blanched and of large size, and perfectly clear of any blemish, such as *rust* or *canker*.

Yours,

J. W. RUSSELL.

Mount Auburn, Cambridge, December, 1839.

[Mr. Russell's articles are so practical, and show such a thorough knowledge of his profession, as to render it unnecessary for us to commend them to our readers. The above, however, on the growth of celery, is of such great value to every lover of this excellent vegetable—so seldom found in our market in perfection—that we must invite the attention of every person who is desirous of producing handsome roots, to Mr. Russell's remarks. They expose, fully, the half-way method of cultivation, so almost universally followed, by those who will not deviate from the beaten track, and explain the manner in which these errors may be remedied. We have, in our first volume, in reviewing some foreign publication, treating upon the cultivation of celery, thrown out some hints on its growth; but we had not the opportunity, at that time, to detail our own experience, and had intended to refer to the subject again. The above article will relieve us of that duty for the present, as it agrees with our own system of cultivation. To all who are desirous of possessing celery in perfection, we particularly recommend a careful perusal of Mr. Russell's remarks.—*Ed.*]

ART. V. *Description of four new varieties of Camellia, raised by Mr. T. Dunlap, Harlem, N. Y. By Mr. DUNLAP.*

IN compliance with your request, I send you a description of some of my new seedling camellias, which flowered for the first time, last winter.

No. 1. *Camellia japonica* var. *Dunlap's Americana*.—Leaves three and a quarter inches long, and two and three quarters wide, nearly flat, roundish oval, slightly acuminate, delicately dentated, smooth, glossy green, finely veined, and of a softness in the texture, I think, sufficient to distinguish it from any other variety. The bud is large, oval, with greenish calicinal scales; petals, seventy in number, full to the centre, clear white, regularly spotted, as in the guard petals of *punctata plena*. The parents of this variety were the old middlemist, fertilized by *punctata*. This being the first fine variety I have raised, I have thought the name appropriate: my reason for applying my own is, to render the variety distinct hereafter.

No. 2. *C. j.* var. *Dunlap's United States*.—Shrub vigorous, leaves broad, oval, four inches long, and three and a half wide, dark green, dentate, recurved at the point, much coarser in texture than the *americana*. Flower four and a half inches in diameter, and form similar to *punctata*, but partakes more of the character of *eclipse*, in color, and is quite as fragrant as *C. var. Parksii*. The parents were the old middlemist, fertilized with *eclipse*.

No. 3. *C. j.* var. *imbricata Dunlapi*.—Leaves three and a half inches long, and two and three quarters wide, roundish, oval, slightly acuminate, thick, clear green. Bud spherical; flower medium size, round; color dark rose, with a whitish shade through the centre of the petals, not unlike *C. var. Prattii*, with, perhaps, a little less of the white shade. Parents old middlemist, fertilized with *C. var. Parksii*.

No. 4. *C. j.* var. *Dunlap's white warratah*.—Leaves medium size, slightly lanceolate, thick, clear green: bud roundish, scales greenish; flower full as compact as *anemoneflora*, rendering it quite distinct from the white warratah (*anemoneflora alba*) in the collections about New York and Philadelphia. Parents, warratah, fertilized with *Pompônia*.

I have several others, two or three of which will bloom the present winter, (1840;) the buds look very promising. Besides these I have several hundred other seedlings, which will

probably bloom in a year or two. Should any of them prove to be fine ones, I will send you a description of each variety at the earliest opportunity, knowing your fondness for fine varieties, particularly such as are produced from seed in this country.

Very respectfully,

T. DUNLAP.

Harlem, N. Y., December, 1839.

[We are gratified in being able, at so early a day, to lay before our friends, particularly amateurs of the camellia, the above descriptions of Mr. Dunlap's seedlings, one or two of which we have incidentally noticed in our previous volumes. Mr. Dunlap has been raising seedlings, ever since we first had the pleasure of knowing him, which was in 1834, at which time he had many plants nearly large enough to flower. We are glad that he has already reaped such good results from his labors, and we trust that many of those, which are coming on, will be equally fine with the above. We hope that every cultivator of camellias, who has the good fortune to raise seedlings worth naming, will imitate Mr. Dunlap's example, and describe them in our pages. Our Magazine will thus serve as a record of all new varieties which may be produced from this time henceforward; and by giving the period when they first flowered, and the parents from which they were raised, (a knowledge of which is always desirable,) much service will be rendered to those who are making collections of this beautiful flower, and guide them, in a degree, in the choice of new varieties. Many seedlings will be annually coming into flower, and we hope that these hints will be sufficient to induce all who may raise good varieties, to accede to our wishes. Mr. Dunlap is an enterprising florist, and already has plants of *americana*, *imbricata* Dunlapi, United States, and white warratah, for sale at reasonable prices.—*Ed.*

ART. VI. *Observations on the Cultivation of the Azalea indica, and other Chinese species and varieties.* By A FRIEND TO FLORICULTURE.

HAVING, for some time back, been much interested in perusing your very valuable Magazine, and perceiving the interest you have always taken to bring into notice any thing new or

interesting in gardening, or to detail any new method of cultivating older and well known plants, which possess a good share of beauty, I have taken the liberty of addressing you a few words upon the cultivation of the *Azalea indica*, and other Chinese species and varieties.

The period for propagating the plants is about the first of August. I then make preparations to put in the cuttings. Pots, (No. 3 or 4,) are selected, and into each one is placed a good quantity of potsherds, in order to allow the water to pass off freely, and to prevent saturation of the earth above. Over these are put some coarse fibrous portions of peat earth, to prevent the soil from falling among the potsherds. The pots are then filled up with a suitable soil, prepared by mixing together two parts sand and one part peat earth. This should be settled down sufficiently firm to allow the insertion of the cuttings.

The cuttings are now selected from each species or variety, and are kept separate, as some root much easier than others. Those which I prefer are cut about two inches long, with one and a half inches of the same ripe wood, the remainder green and vigorous. The lower leaves are taken off, and the cuttings inserted firmly into the soil, about three fourths of an inch deep. The operation is finished by giving a slight watering.

I now proceed to place the pots in a close, cold frame, facing the north, and take particular care to shade them for the first two weeks, and if the weather is very hot, as it often is at this season, I let the covering remain a week or so longer. After that period the shade is wholly removed.

About the first of October, the pots containing the cuttings may be taken into the hot-house, where they should be placed in the shade, if possible. In a short time they will become sufficiently rooted to pot off: the period, however, for doing this is, when the cuttings show signs of commencing to grow. Pots three inches in diameter, (No. 1,) should be selected for this purpose, and the compost prepared as follows, viz:—one half peat earth, one quarter yellow loam, and one quarter sand. After they are potted off, I keep them in a rather warm and close situation, for the first month, after which time they are placed in the green-house, selecting shelves as near the glass as possible. At this period great care should be observed in giving water: too large quantities would cause their death: when, however, the plants have grown an inch or two, and look healthy and vigorous, water may be given more liberally. Young plants may be shifted with advantage twice a year, for the first two years, if it is desired to hasten their growth. At

the first potting off, and at each subsequent shifting, always observe to give a good drainage to the pot, that all superfluous water may be carried off.

The mode of after treatment is as follows:—From the first of May, to the fifteenth of October, I place the plants in a cold frame, facing the north; always drawing off the sashes at night, in hot weather, and closing them up again in the morning. I also give the sashes a slight coat of composition, which answers the place of a cloth or mat, to shade the plants from the rays of the sun. This composition is prepared by mixing together a small quantity of flour and water, to the thickness of paint: this is slightly boiled, to give it consistency, and it is then applied to the outside of the sash, with a common painter's or white-wash brush, so as to cover every part. In the fall of the year, when the plants are removed, this can be easily washed off, choosing a damp day for the purpose.

The remainder of the year, (from October to May,) the plants may be kept safely in a dry pit, facing the south. The pit should be floored over with boards, so as to prevent the worms from finding egress to the pots. During cold weather, the sashes should be protected by a covering of thick straw mats. When there are but few plants, there will be no necessity of erecting a pit, as the plants may be kept in the green-house.

The azaleas will stand a great deal of cold, especially the *A. indica* var. *purpurea pleno*, which has stood the winter here, in some of the nurseries, (though I have not seen it;) yet I know that it is very hardy, and an almost deciduous variety. It will not endure forcing so well as many of the other varieties and species, particularly the white, which may be forced into flower any time during the winter, without the least injury to the health of the plant.

The above treatment applies to azaleas, although I have cultivated many of the rhododendrons, kalmias, &c., in the same manner. But if you think my remarks will serve to render the cultivation of this family better known, and at the same time add to the interest of your pages, you are at liberty to use them as you please.

A FRIEND TO HORTICULTURE.

Philadelphia, November, 1839.

We hope our correspondent will continue to give us other practical articles, similar to the above, on the growth of various plants.—*Ed.*

REVIEWS.

ART. I. *The Farmer's Companion, or Essays on the Principles and Practice of American Husbandry, with the Address prepared to be delivered before the Agricultural and Horticultural Societies of New Haven county, Conn.; and an Appendix, containing Tables and other matter, useful to the Farmer.* By the late Hon. JESSE BUEL, Conductor of the *Cultivator*. 12mo., pp. 303. Boston: Marsh, Capen, Lyon & Webb. 1839.

ONE great obstacle to a more rapid advancement of agriculture, in this country, has been the want of correct and practical information upon the subject. It is true that, within the last few years, numerous agricultural periodicals have sprung up, and among them some of much merit, which have been valuable aids in the diffusion of practical knowledge. The *Cultivator*, of which the much lamented author of the Essay, at the head of this article was the originator and conductor, has been, above all, signally instrumental in effecting important changes in American husbandry. To the practical knowledge which he possessed he united sound theoretical information, which enabled him to impart useful lessons to the husbandman. No writer, among the many who have contributed to the instruction of the farming community, has seemed to take so broad and comprehensive a view of the importance of agriculture, as a means of enhancing the prosperity of the country, and the condition of society, as Judge Buel. His heart and soul were enlisted in its cause; and he labored hard to disseminate such information as would eradicate the old and exploded method of farming, and to introduce, in its place, the modern and more rational system, which would be so influential in producing the opposite results of the old system. He was aware that it was an arduous task. To combat the prejudices of those who had for years followed in the same beaten track, almost determined to listen to nothing which was an innovation upon the established practice, was no vain work. But he made the attempt, and, it is scarcely necessary for us to say, with such remarkable success as to accomplish the most unexpected results. One of the principal objects, for which he labored, was the elevation of the agricultural profession. The idea, which has been so prevalent with many, that ploughing, and digging, and planting, and gathering, constitute the sole requirements to practise

farming successfully, has tended to rank agriculture—the parent and fostering mother of all arts—so low, as to render the occupation of a cultivator of the soil one of derision, and an employment from which hundreds have turned away, to seek out other sources of business, which they have imagined would confer more wealth and respectability.

But the dissemination of better information has awakened reflection upon the subject. If agriculture has not been elevated to its proper place, it has been because those who practise it have not made any attempts to improve the art, or enlighten their minds—they have not gone into the principles of the science—they have not studied the unerring laws of nature, which have such a controlling influence upon vegetation. Physical power has alone been deemed the important requisite, and science discarded altogether. But, in the language of the author of the above work we may say,

“There is a redeming spirit abroad. The lights of science are beaming upon the agricultural world, and dissipating the clouds of superstitious ignorance which have so long shrouded it in darkness. The causes which have for some time been actively operating to improve the condition of the other arts, and to elevate the character of those who conduct them, are extending their influence to agriculture. A new and better system of husbandry is coming into vogue, which has already been productive of great good, and which promises many new comforts and blessings to ourselves and children.”

We have thus noticed some of the many important changes which have been made in our agriculture, during the last eight or ten years, in a degree, we believe, through the influence of Judge Buel. We had anticipated still greater advancement by the aid of his useful pen; but he has been suddenly taken from us by an all-wise Providence, when his services were becoming of the greatest value, and we trust that the good precepts which he advanced, and the excellent example which he set, may long exert their beneficial effects upon the agriculture of the country.

The present essay was prepared by Judge Buel but a short period before his death, and the last sheet had but just been issued from the press, when the community were called upon to mourn his loss. It would be useless for us to occupy space with a simple review of the work, as we could not do it any justice in the limited room we have to spare. Every farmer should own it—he should not only own it, but should read it—he should study it—it should be his text-book, in all matters relating to farming;—and if it is not the means of doubly increasing the products of his farm, it will be because the author's plain, practical and familiar lessons have been disregarded.

The Essay is divided into twenty-seven chapters, the last of which treats on rural embellishment; and, as this is a subject which has received but little attention, especially from farmers, we cannot refrain from making some extracts from this chapter. It commences thus:—

“There are few things better calculated to attach us to our homes,—where the social virtues love to congregate, and to dispense their blessings,—than rural embellishments. This is true, whether we apply the term to our neighborhood or individual abode. The public grounds about the great cities of the old continent, some of which comprise an area of five hundred acres, are the theme of general admiration, the theatres of healthful exercise and recreation, and the sources of high intellectual enjoyment. The lesser towns and villages, even of our own country, owe more of their charm and interest to the trees and plants which embellish their squares, streets and grounds, in the eye of a man of taste, than to any ostentatious show of brick and mortar—more to the beauties of Nature, than to the works of man. Nay, the highest efforts of the human intellect are in vain put in requisition to imitate the handiworks of the Creator. And when we come down to the suburban residence, and even to the unostentatious abode of the farmer, how are their beauties heightened, and their value enhanced, by a screen of ornamental trees, and a well-kept garden.”

It is a common opinion, that he who plants trees, does not plant for himself, but for posterity; that he will not enjoy their fruit, or recline beneath their shade; but that those who follow after will reap the benefits of his labors. Judge Buel has shown the fallacy of such reasoning, by relating his own experience on the subject.

“Loudon tells us, that in travelling from Strasburgh to Munich, he passed through a continued avenue of forest and fruit trees, planted on both sides of the highway, for more than one hundred miles. Who that has passed through New England, in summer, has not admired the beautiful trees with which he is in a measure enshrouded? The great objection to planting is, that one may not live to enjoy the fruit or the shade of the trees which he plants. Such an objection is unworthy of the age, which should, if it does not, have regard to the interests of the human family, and of posterity,—and is, besides, affecting to hold a shorter tenure of life than all of us hope for, and most of us expect. Twenty years ago, at forty years of age, we commenced the cultivation of what was termed a barren, untameable common, not an acre of which had been cultivated, and on which a tree or shrub had never been planted by the hand of man. We have now growing in our court-yard, comprising about half an acre, and in the highway in front of it, fifty species of forest and ornamental trees, many of them forty and fifty feet high, more than fifty species of ornamental shrubs, not including the rose, besides a vast number of herbaceous, ornamental, and bulbous and flowering perennial plants—the greatest number of which, in all their variety and hue of foliage, flowers, and fruit, may be embraced in a single view from the piazza. Most of our fruits have been raised by us from the seed, or propagated by grafting or budding. Yet we can enumerate more than two hundred kinds, including varieties, which we are now in the habit of gathering annually from trees, vines, &c., of our own plant-

ing. We feel grateful to God for these rich and abundant blessings, and for the impulse which prompted our labor. We have adduced our own example, not in a spirit of vaunting, but to convince the young and the middle-aged, that there is abundant reason for them to plant, with the hope of enjoying the fruits of their labor. The old *should* plant from an obligation they owe to society, and for the requital of which they have but a short period allowed them. The young should plant for the double purpose of benefiting themselves and their children.

"We would by no means advise that the farmer should confine himself to mere ornamental trees. There are many fruit trees that are not only ornamental but useful, about dwellings, as the cherry, pear, apple, quince, &c.

"There is not a spring or an autumn in which a few hours cannot be spared, without detriment to the labors of the farm, to plant out fruit and ornamental trees add shrubbery about the dwelling, and but very few hours are requisite. There is no great art required in the business. The holes for the plants should be dug larger and deeper than the size of the roots, in order that these may be surrounded on all sides by a rich surface mould, into which the new roots may push freely, and find food. The infertile soil from the pit should be thrown away, and its place supplied by mould taken from the surrounding surface; the roots should have their natural direction, and the earth be well pressed upon them; and the plants should be protected from cattle till they are of a size not to be injured by them."

We commend the work to every individual interested in agriculture; and we trust its dissemination will improve and elevate the standing of agriculture, and conduce to its prosperity throughout the country.

MISCELLANEOUS INTELLIGENCE.

ART. I *Foreign Notices.*

ENGLAND.

New Dahlias.—The great annual Dahlia Show of the Royal Society of Horticulture and Agriculture, was held on Wednesday, the 27th of September last, at the Society's Flower Hall, Stafford House, Chiswick. There was an immense assemblage of dahlia growers present, and a great number of seedlings were exhibited. But it seems, from the award of prizes, that very few were deemed worth a prize, as they possessed no merit above hundreds already in the catalogues. The seedlings selected were of the first and second class, of the growth of 1838, and a few were also shown of the growth of 1839. In the report of the exhibition, in the *Horticultural Journal*, it is remarked, that the prevailing faults of the scores of seedlings,

which were unnoticed, were quilling too much, irregular centres, bad eyes, want of substance, and a disposition to be starry. All these qualities being now considered, in rendering judgment on a dahlia, a larger part must, of necessity, fail to take their rank as good flowers. All flowers which showed a tendency to quill, were refused, as well as those with irregular centres; it is not sufficient now that the centre should be merely filled up, but it is desirable that the petals should be a continuation of circles, the last of which should touch each other, so as to form a perfect finish. It is only when many admirable properties are possessed, that the clumsily finished centre can be tolerated. Other objections were, the collapsing of the petals, or their distance from each other, which made the outer edges like a star. These were rejected. Those naturally thin, though pretty, were also thrown out. Others were rejected, particularly among the reds and purples, which were tolerably good, but the catalogues are already well filled with fine flowers of the same color.

We are glad to see that reform in this matter has been begun so earnestly, and we hope it will effectually put a stop to the system of palming upon the amateur gardener ordinary flowers, just because they may chance to be new seedlings. The cultivation of the dahlia has been checked, in a degree, in this country, by this practice: the blame, however, is to be attributed to foreign cultivators. The dahlia has arrived to such perfection, in form, that it is difficult to procure a superior variety, possessing any uncommon beauty. Yet hundreds of new seedlings are annually sold, at enormous prices, of which not one fifth are superior to older flowers. The Royal Society, under the direction of Mr. Gleunny, who is a great dahlia fancier, has attempted to reform this state of things, and we sincerely hope that they will not give a prize to a new flower, unless it possesses superior qualities, as a whole, to those previously cultivated.

We regret that the names of the winning flowers at this show are not given. The number of blooms was so numerous as to prevent this. Twenty-four prizes were awarded for different stands; and eight prizes for seedlings of the first class, and seven prizes for seedlings of the second class, all of the growth of 1838. The names of those in the first class are Cox's Yellow Defiance, Bloomsbury (a buff,) Pickwick (a rich purple,) Scarlet le Grand, and four not named. Of the second, Bishop of Winchester (a purple,) Grenadier (an orange,) and five unnamed.

The Metropolitan Society of Florists and Amateurs held evening meetings in October, and several seedling dahlias were sent from various parts of the country: from these the members selected the best. Those which were remarkable for their elegance were Cox's Yellow Defiance, Cornack's Nicholas Nickleby, Hogarth's Lady Holland, Pamplin's Bloomsbury, Sparry's Beauty of the Plain, and Gregory's Mr. Neelde. At a subsequent meeting of the Society, a discussion arose respecting the comparative merits of Egyptian King and Duchess of Richmond. It however seemed to be admitted, that the former, though a splendid shape, was difficult to catch well filled up, (a fault with one half of the new dahlias;) and that the latter bloomed hard in the eye, and was pinched in the petals. The same defects in the latter flower were observed by us in the blooms which were exhibited here the past autumn; and, as it does not appear to be a peculiarity of the climate, as was supposed by some cultivators when examining the flower, as it came out at a high price, we are led to conclude that the faults of many flowers, which have been attributed to the

same cause, arise from the habit and character of the plant, rather than from any peculiarity of climate or treatment. If a flower has a disposition to show a bad eye, no difference of climate will render it perfect; where dahlias thrive sufficiently to bloom at all, the blooms, or a larger part of them, will show the true character of the flower; and though one out of twenty may be perfect, the variety may be set down as one which, from its uncertain blooming, is not entitled to the name of a first rate flower. We hope soon to receive more returns from the English dahlia shows, and when they come to hand, we shall notice them at length.—*Ed.*

ART. II. Domestic Notices.

Silk Convention at Washington, D. C.—On the 11th of December, a Convention assembled at Washington, D. C., for the purpose of consulting upon the best means of extending and diffusing information throughout the Union, upon the interesting and important subject of the manufacture of silk. A large number of gentlemen were, accordingly, present, and fourteen States were represented in the Convention. It was called by order of the National Silk Society, but the American Silk Society united with the Convention, and proceeded with energy into the important business before the meeting.

On the evening of the 12th, several gentlemen addressed the Convention. The Rev. D. V. McLean, of Freehold, N. J., went into a full detail of an experiment which he had made the past year, and which had previously appeared in the columns of the *Journal of the Silk Society*. The experiment was made with a view to ascertain the exact result of the profits of one acre, when subjected to the ordinary treatment which he supposed would attend the feeding of worms, and the reeling of silk, by the mass of the community who should commence the business. The result, though not coming up to the wild statements of over zealous advocates of the silk culture, was, however, at least sufficient to establish the fact, that no other agricultural production was *one quarter* as profitable to the cultivator. Mr. McLean's statement is too long for us to attempt even a condensed account of it; but we may remark that the lowest possible profit, estimating the silk at the very low price of \$4.50 per pound, was \$108 per acre! and at \$6, the current market value, \$180. His product was at the rate of fifty pounds of silk to the acre, and the worms fed from trees raised from cuttings and layers planted the same year! Mr. McLean occupied the attention of the meeting for one hour and a half, and his remarks were listened to with undivided attention. The Society will probably request a copy of his remarks, and we hope that they will be published, together with his experiment, as published in the journal alluded to, in pamphlet form, by the Society, and one hundred thousand copies printed and distributed throughout the country. All the books which have been written by nurserymen and others, who know nothing of the feeding of the worms, and who have offered nothing but compilations from foreign authors, are not worth the single statement of Mr. McLean. It is plain, practical, and at once to the point, and a single perusal of it

by any intelligent farmer, will enable him to reap as favorable results as attended Mr. McLean's experiment.

The meeting on the evening of the 12th, was held in the Representatives' Chamber, at the Capitol. An immense number of silk productions were exhibited, from the raw material to the finest manufactured fabric, giving conclusive evidence, to the numerous assemblage present, that perseverance in the cause is only wanting, to render this branch of domestic industry one of the most profitable resources to the community. Every individual who has the prosperity of his country at heart, cannot but feel anxious that this patriotic enterprise should receive the encouragement of all classes of the community; and he who throws obstacles in the way of its progress, must be considered as an enemy to its future welfare.—*Ed.*

Arboretum in the Harmony Grove Cemetery, Salem.—The favorable and open weather the present autumn, has enabled the proprietors of this place to go on grandly with the work of planting trees, and accomplish much that would otherwise have to be deferred until the ensuing spring. I trust that, in a few years, a complete arboretum will here be found, containing every tree and hardy shrub that will bear the rigors of our climate. This being accomplished, will add much to the beauty of the cemetery, and, at the same time, will afford an opportunity of pursuing, advantageously, the study of this department of botany, a department too much neglected by amateurs. The feathery tribes will then be induced to revisit this their once favorite spot; the squirrels will resume their gambols and chirping amongst the branches, now that the truant school-boy is not permitted to disturb or molest them; the butterfly will be fluttering in the summer's sunshine, sipping nectar from every opening flower—in fine, all nature will seem to live in unison with the peace and solitude there predominant. Thus we shall truly have a beautiful place, and one well deserving its old and familiar name of *Harmony Grove*.—*Y., Salem, December, 1839.*

Botanical Garden and Nursery of Messrs. Ellwanger & Rogers, Rochester, N. Y.—Messrs Ellwanger & Rogers have a good collection of plants, not very extensive, at present, but of some genera they have a fine assortment, particularly of geraniums, roses, camellias, and cactuses. Some of the newest varieties of camellias were imported from Europe late last spring, and arrived in rather a sickly state; but they are now in a healthy condition, and have made shoots from four to six inches long. Of cactuses, Messrs. Ellwanger & Rogers have sixty species and varieties, and thirty more are daily expected from Europe. The *Echinocactus Ottónis*, will open in a few days, of which you shall have some account. They being acquainted with one of the best cactus collections in Europe, have the advantage of getting the very best and newest species. Ellwanger & Rogers have purchased about seven acres of land, near the entrance to the cemetery, which they are laying out for a botanical garden and nursery. It is their intention to build a green-house there next spring, and to remove their present green-houses, &c., on to the spot at the same time. It will be one of the finest establishments in the western country, and will be a great ornament to the whole neighborhood. Messrs. E. & R. are determined to make their establishment worthy of the city which gave rise to it.—*An Observer and Subscriber, Rochester, N. Y., Sept., 1839.*

Rohan potatoes.—My two small Rohan potatoes, which you presented me, not larger than hens' eggs, I had planted on the "Sand Prairie," so called, about ten miles from Galena, and they have

produced me *three* bushels!! good measure. This is the largest yield I ever heard of.—*Yours, H. N., Galena, Ill., Nov. 1839.*

Epiphyllum speciosum.—Some fine large grafted plants of *Epiphyllum speciosum* are now in bloom in the collections in the vicinity of Boston. In the Conservatory of the Public Garden, in Mr. Sweetser's collection, and in the collection of Hovey & Co., there are some specimens which are now displaying two or three hundred blossoms each, presenting a rich and brilliant display at this dreary season of the year. The beauty of this species, when grafted, can scarcely be estimated by those who have never seen it only on its own roots. When on a vigorous stock, the plants spread out two or three feet wide, and with their drooping stems, terminated with hundreds of flowers, are one of the most conspicuous objects of the green-house. They are easily grafted, and if the *Cereus triangularis* is used for the stock, the plants in twelve months will increase to a greater size than they will on their own roots in three years. Every lover of this tribe should possess one or more grafted plants of this species.—*Ed.*

Dahlias.—The six dahlias you sent me last spring, were planted in my garden, and were the admiration of every one that visited our town. One of them, eight feet high, had thirty perfect flowers on it at one time.—*H. N., Galena, Ill., Nov. 1839.*

ART. III. *Pennsylvania Horticultural Society.*

Since the report of the August meeting appeared in our pages, we have not received any thing in relation to the subsequent exhibitions from our correspondent. The eleventh annual exhibition of the Society took place on the 18th, 19th, 20th, and 21st of September, and was the largest and most splendid display ever made by the Society. The report of the exhibition has been published in a pamphlet of forty pages, and is nearly filled with the plants, flowers, fruits and vegetables exhibited, the names of the contributors, and the award of premiums by the judges. It will be thus seen that it is impossible for us to give only a condensed account of the exhibition, without occupying too much space.

The annual meeting for the choice of officers was held on the 21 of September. Horace Binney, Esq. was again chosen President, and our correspondent, Dr. Watson, Recording Secretary, in the place of J. W. Burrows, who declined a re-election.

The annual exhibition was held in the splendid saloon of the Philadelphia Museum on the days above named. The committee remark that "No former exhibition can, in all points, compare with the last, of which the details will be given in the official reports. The attraction to the public was such, that it was continued a day beyond the limit originally fixed, notwithstanding the plants were exposed to some injury by their position, and the fruits and flowers, being at perfect maturity when first presented, were diminishing in beauty after the first or second day. At least eighteen thousand persons testified their gratification by visiting the exhibition, many of them more than once, and giving a minute attention to all that was most worthy of notice. A more brilliant spectacle than that which was presented by the saloon, the plants, flowers and fruits, and the multitudes of beau-

tiful women and their attendants, who formed a perpetual promenade round the apartment during the day, and until a late hour of the evening, cannot be imagined.

"The most striking feature in the exhibition was the great table spread in the centre of the saloon, and extending a hundred feet in length by sixteen in breadth, with circular ends, running by four gradations to the height of about twelve feet. On the upper platform was displayed a part of the beautiful collection of Mr. John B. Smith, including the *Corypha umbracaulifera*, *Latania borbonica*, *Phoenix dactylifera*, *Caryota urens*, *Zamia horrida*, *Pandanus utilis*, *Elæis guineensis*, with numerous fruit-bearing orange and lemon trees, a beautiful *Lagerstræmia indica*, and specimens of the *Myrtus communis*, in full flower, and a variety of other plants. The three lower steps or elevations contained plants of gradually lessening height, many in full bloom, including the *Musa rosacea*, *Yucca gloriosa*, *Manettia cordifolia*, a singular and beautiful *Aristolochia braziliensis*, *Myrtus communis*, *Lagerstræmia indica*, *Camellia speciosa*, &c.; and on the lowest step or grade, was displayed in glass dishes, around the whole table, an immense variety of beautiful fruits, interspersed with bouquets. It is impossible by any description to do justice to this beautiful table, especially as it was seen from the upper walk or gallery of the Museum. The coup d'œil struck every one, and arrested the eye for some time before it could look at the details.

"At the eastern end of this principal structure, and between it and the orchestra stage, was a table seventeen feet in length, which contained the prize fruits and vegetables, dahlias of great beauty and variety, and bouquets of flowers.

"At the western end, and immediately in front of the visitors as they entered, and between them and the principal table, was a chaste cupola of roses, and a floral structure of considerable height, resembling a standard, covered with flowers of every variety, and arranged in many forms, with festoons leading from its summit to the galleries, and dishes of fruit around its base. Near it was the remarkable submarine vegetable, heretofore exhibited, by the popular name of 'Nepenthe's Wine Cup.' In front of the organ loft, at the western end of the saloon, was a representation, in flowers, of the State House; and directly over the entrance was suspended a balloon covered with dahlias.

"On the orchestra stage, at the opposite extremity, was a specimen of the *Nepenthes distillatoria*, or pitcher plant, which had grown to the height of twelve feet or more, since the last exhibition. It was on the left or north-west angle. In the centre front was a large vase, in imitation rock-work, surmounted with a large conical bouquet of flowers, tastefully arranged, with small bouquets of the same shape, in vases, on either side. In the centre of the stage was a design, in imitation of Chinese architecture, and something in the style of the pagoda, most richly and profusely decked with flowers, which took the first premium; and on a platform, in the rear, was a temple of Flora, covered with more than four thousand dahlias, in all their brilliant colors.

"Around the edge of this stage were arranged flowering plants, in pots, such as roses, petunias, salvias, cacti, &c. &c., and over the back passage, from the stage, was suspended an air plant, in bloom—a beautiful specimen of one of the most interesting classes.

"Within the paliades, enclosing the skeleton of the mastodon, elephant and rhinoceros, and around, under and about these striking objects, were arranged, as a not unfit accompaniment, the interesting

but grotesque species of *Cactœm*, *Crassulacœm*, and *Euphorbiacœa*, with several striking *Stapéliæ*.

"Finally, in the alcoves, formed by the cases of the Museum, containing specimens in Natural History, on each side of the saloon, and running its whole length, were distributed dahlias, esculents, fruits, and bouquets, in great variety and profusion.

"An apartment better fitted, in some respects, for such an exhibition, could not be found; but from its great magnitude in length, breadth, and height, and the number of alcoves on each side, it became a proud test of the affluence of the city of Philadelphia and its neighborhood, in plants, flowers and fruits; for nothing but an unbounded supply could have filled all parts of this immense room, without somewhere betraying either poverty or vulgarity. The contributions were such, however, as to leave no want unsupplied, and materials, of every kind, were in such beauty and variety, as to carry out every arrangement that was desired.

"The Committee of Publication are aware that this brief outline of the arrangement will be of little use to those who did not attend the exhibition, and will be thought by those who did, to be very far from fully representing it; but it has been thought proper to preface by it the details of the contributions which will now be noticed more particularly."

Plants:—An immense number of plants were exhibited; we can only give the aggregate number of each contributor. From J. B. Smith, forty-five plants, mostly palms and *Cacti*. Col. Carr, twenty-four plants. Gen. Robert Patterson, sixty plants. Geo. Pepper, Esq., eighty plants. Philip Physic, Esq., forty plants. T. Landreth, thirty plants. J. McArran, twenty-four plants. F. J. Gutzsall, twenty-four plants. Mackenzie & Buchanan, nearly one hundred. R. Buist, upwards of one hundred. R. Kilvington, one hundred and ten, including about twenty-five *ericas*. Mrs. Hibbert, sixty. Alexander Parker, upwards of one hundred. Ritchie & Dick, forty-five. John Sherwood, thirty. A. Dryburgh, thirty; besides many others who contributed smaller numbers.

Bouquets, fancy designs, &c.:—The following variety of bouquets, fancy designs, &c. were contributed.

By Joseph Cook, a beautifully formed design, ornamented with a great variety of flowers, &c. in good taste. Hirst & Dreer, a spacious pavilion, entirely covered with dahlias. Robert Meston, a large imitation rock vase, surmounted by a tasteful pyramid of cut flowers, displaying much skill. Daniel Maupay, a very large device, twenty-five feet in height, formed with a profusion of flowers, festoons, and surrounded at the base with dishes of various fruit. Edward Hibbert, a beautiful imitation of the state house, covered with a variety of flowers, for which he is entitled to much credit. Watt & Ritchie, a neatly designed cupola enveloped with roses. John Sherwood, a fine cone bouquet. William Chalmers, a tastefully arranged pyramid of cut flowers.

By Algernon S. Roberts, a large urn of beautiful flowers in form of a pyramid, arranged with taste. Mrs. Gen. Patterson, two glass vases of choice flowers, admirably arranged. Miss Percival, several small vases and bouquets, evincing much taste. Hirst & Dreer, a balloon with basket suspended, formed of a profusion of dahlias. Robert Kilvington, a number of basket bouquets.

By Lewis Uher, a pair of festoons formed wholly of dahlias. Charles Conover, a pair of festoons, of evergreens tastefully interwoven with numerous flowers. Robert Buist, a festoon, from which

were suspended several epidendrums, or air plants, in bloom. Messrs. Coopers, several festoons of evergreens interspersed with flowers.

Fruits:—The quantity of fruit displayed was so great, and the contributors so numerous, that we have no room for their insertion.

Vegetables:—There were specimens exhibited in great variety, and by a large number of individuals.

The award of premiums for flowers, fruits, and vegetables occupy so much space, that we can only find room for the report of the Committee on Dahlias, which is as follows:—

For the best twelve dahlias, to Hirst & Dreer, named *Kingscote Rival*, *Ansell's Unique*, *Widnall's Reliance*, *Ne Plus Ultra*, *Wilmer's President*, *Striata formosissima*, *Trafalgar*, *Madonna*, *Fisherton Champion*, *Mayhew's Rosetta*, *Marshal Soult*, and the *Royal Standard*.

For the next best twelve dahlias, to Thomas Hancock, Burlington, N. J., called *Widnall's Reliance*, *Widnall's Nimrod*, *Godwin's Rival Rose*, *Elphinstone's King of Yellows*, *Knight's Lady Webster*, *Lehman's Clara*, *Elphinstone's Conqueror of Europe*, *Elphinstone's Rosa superba*, *Countess of Sheffield*, *Middlesex Rival*, *Girling's Exquisite*, and *Mrs. Wilkinson*.

For the best American seedling parti-colored dahlia, to Thomas Heiskill, Bristol, Pa., named *Fanny*, a finely cupped dark rose colored.

For the best American seedling self-colored dahlia, to Gerard Schmitz, Moyamensing, a very fine white, which he has named *Miss Percival*.

For the best design, formed of flowers, to Joseph Cook, gardener to William Norris, Esq.

For the next best design, formed of flowers, to Hirst & Dreer, for a beautiful pavilion, covered with four thousand flowers of the dahlia.

For the best bouquet, to Mrs. Gen. Patterson.

For the best pair of festoons, to Lewis Uber, composed entirely of dahlia blooms.

For the next best pair of festoons, to Charles Conover, gardener to Thomas C. Rockhill, Esq.

The committee have awarded the following honorary premiums:—

For a beautiful festoon, an honorary premium of three dollars, to Robert Buist.

For several festoons, an honorary premium of three dollars, to Messrs. Coopers.

For a beautiful cone bouquet upon a large imitation rock vase, an honorary premium of seven dollars, to Robert Meston, gardener to Mrs. Rowland.

For a very pretty cone bouquet, crowned with an eagle, an honorary premium of five dollars, to William Chalmers, sen., gardener to Mrs. Stott.

For a cone bouquet, an honorary premium of three dollars, to John Sherwood.

For a beautiful imitation of the State House and steeple, an honorary premium of five dollars, to Mrs. Hibbert.

For a fine cupola, enveloped in roses and crowned with an eagle, an honorary premium of five dollars, to Watt & Ritchie, of Monument Cottage Garden.

For a very large device, twenty-five feet in height, composed of flowers in great variety, an honorary premium of seven dollars, to Daniel Maupay.

For bouquets, an honorary premium of three dollars, to Ritchie & Dick.

The committee make honorable mention of fine dahlias, exhibited by R. Buist, Mackenzie & Buchanan, Mrs. Hibbert, William Hobson of Kingsessing, William Carville, of Haverford School, Thomas Heiskill, Thomas Hancock, Gerard Schmitz, and Hirst & Dreer.

ART. IV. Faneuil Hall Market.

			From	To				From	To
<i>Roots, Tubers, &c.</i>			\$ cts.	\$ cts.	<i>Squashes and Pumpkins.</i>			\$ cts.	\$ cts.
Potatoes:					Squashes, per pound:				
Chenangoes,	per barrel,	1 25	1 50		Winter crook neck,	2 00	2 50		
	per bushel,	50	—		Autumnal Marrow, per lb.	3 00	4 00		
Common,	per barrel,	1 00	1 12½		Canada crook neck,	3 00	3 50		
	per bushel,	50	—		Pumpkins,	20	25		
Eastports,	per barrel,	2 25	2 50						
	per bushel,	1 00	—						
Sweet Potatoes,	per bush.	1 25	1 50						
Turnips:					<i>Fruits.</i>				
Common,	per bushel,	25	37½		Apples, dessert, new:				
Ruta Baga,	per bushel,	37½	50		Common,	per barrel,	2 00	2 50	
Onions:						per bushel,	1 00	—	
White,	per bushel,	1 00	1 50		Russets,	per barrel,	3 00	3 25	
Red,	per bunch,	8	4			per bushel,	1 50	—	
White,	per bunch,	2	3		Baldwins,	per barrel,	3 50	4 00	
Yellow,	per bushel,	62	75			per bushel,	1 50	—	
Beets,	per bushel,	50	62½		N. Y. pippins,	pr barrel,	3 00	3 50	
Carrots,	per bushel,	50	62½			pr bushel,	1 50	—	
Parsnips,	per bushel,	62½	75		Gr. eatings,	per barrel,	3 00	3 50	
Horseradish,	per pound,	10	12		Pearmaines,	per barrel,	3 00	3 50	
Radishes,	per bunch,	10	12		Sweet,	3 00	3 50		
Shallots,	per pound,	20	—		Dried apples,	per pound,	7	8	
Garlic,	per pound,	12	—		Pears:				
<i>Cabbages, Salads, &c.</i>					St. Germain,	per doz.	50	1 00	
Cabbages, per dozen:					Winter St. Michael,	pr doz.	50	75	
Savoy,	37	50			Chaumontel,	per half peck,	50	75	
Drumhead,	75	1 00			Baking,	per bushel,	2 00	2 50	
Red Dutch,	50	75			Grapes, per pound:				
Cauliflowers,	each,	12½	25		Black Hamburg,	—	—		
Brocoli,	each, scarce,	20	25		Malaga,	17	20		
Lettuce,	per head,	6	10		Quinces,	per bushel,	3 00	4 00	
Tomatoes,	per dozen,	50	75		Cranberries,	per bushel,	2 25	2 50	
Celery, per root:					Lemons,	per dozen,	20	25	
Common,	6	8			Oranges, per dozen:				
Bailey's Giant,	10	12			Sicily,	25	—		
Spinach, per half peck,	25	—			Havana, (sweet),	37½	50		
<i>Pot and Sweet Herbs.</i>					Pineapples,	each,	—	—	
Parsley, per half peck,	50	—			Cocoanuts,	each,	5	6	
Sage, per pound,	17	20			Chestnuts,	per bushel, scarce,	4 00	4 50	
Marjorum,	per bunch,	6	12		Walnuts,	per bushel, plenty,	1 75	2 00	
Savory,	per bunch,	6	12		Almonds, (sweet),	per pound,	4	—	
Spearmint,	per bunch,	3	6		Filberts,	per pound,	4	—	
					Castana,	4	—		
					English walnuts,	per lb.	5½	6	

REMARKS.—In our last report we were obliged to defer our remarks for want of room. Since then, there has been but a slight change in the state of the market. There has been a sufficient supply to satis-

fy the usual demand, and, with one or two exceptions, prices have ranged nearly the same. The fine and open weather of December favored the farmer in securing and huryesting his crops in good condition.

Some kinds of Potatoes have improved a little since our last date. The closing of many of the eastern ports, by the cold weather, has prevented a stock from being sent forward, and, consequently, Chenangoes and Eastports have advanced a shade; common reds, whites, &c. remain without alteration. Of Turnips there is an abundant stock, and of excellent growth. The stock of Onions is larger than it has been for a year or two past, at this season, and they go off rather heavily. Beets, Carrots and Parsnips are plentifully supplied. Horse-radish a good stock, and of very fine appearance. Radishes have continued to come to hand, but not of very great excellence; in a few days, however, the quality will be much improved. The stock of Cabbages, which was large, has been taken up, and at present there is not a full supply: a little improvement in prices has taken place. Cauliflowers are received of handsome size, but they are not abundant. Some Brocoli are also to be had, though they are very scarce. Tomatoes of forced growth sell well at quotations. Celery abundant and fine. Spinach has held out well. In Squashes there has been a considerable change; although the fall was so favorable to the ripening of the crop, yet they do not keep as well as usual, and, in consequence, prices have fully doubled since our last. Crooknecks, marrows, &c., perfectly sound, and free from danger of rot, command our quotations.

In fruit there has been a slight improvement. Apples do not winter as well as usual, and those of picked and superior quality command good prices; very little is done in shipping. Fine eating pears are nearly all gone, only a few prime St. Germaine remaining on hand; baking have slightly improved. Grapes are abundant, and rather a drug. Quinces are about gone. Cranberries are higher, from a reduced stock and a good demand. Lemons remain about the same; late arrivals have kept the market supplied. Chestnuts are high and scarce. Walnuts are excellent this season, and abundant.—*M. T., Boston, Dec. 28, 1859.*

HORTICULTURAL MEMORANDA

FOR JANUARY.

FRUIT DEPARTMENT.

There is but little to do in the fruit department this month. The grape vines should have been pruned ere this, and all preparations made for spring growth. In the open air every thing has probably been protected, and the severity of the cold will not allow of any thing being done in the garden. Where there is a hot-house, however, grape vines may now be started for an early crop, and strawberry plants in pots may be brought from a frame where they should have been wintered. Peach trees, and other kinds of fruit trees in pots, may be also

brought into the hot-house for producing early fruit. As there is so little to do now, the industrious gardener should be preparing for spring, by making labels, sticks for tying up plants, trellises, &c., and all other work which would require to be done in the spring that can be performed now.

FLOWER DEPARTMENT.

Camellias will now display their flowers in the greatest perfection. Keep the plants liberally supplied with water. The plants may be also syringed occasionally, though not very often, as it has a tendency to tarnish the light-colored and more delicate petaled flowers. The seeds should be sown this month in pans or pots, of light sandy soil. Attend to the impregnation of the flowers, if seeds are wanted for producing new varieties.

Azaleas should have a little more water administered this month, but not too abundantly until they begin to bloom.

Roses should be pruned and top-dressed, and be placed on shelves as near the glass as convenient.

Lechenaultias will bloom more profusely now, and should receive more water.

Oxalis, of several sorts, will now be coming into flower; give them plenty of water.

Ixias, *Sparaxis*, &c., will also begin to flower the latter part of the month. Give them a situation near the glass.

Geraniums will need to be occasionally looked over, as the aphid trouble them at this season. If any appear, fumigate the house with tobacco.

Hyacinths, in pots, which were planted in November, will now open their flower buds, if they have been treated properly. Give them a good supply of water when in flower.

Dahlias, for very early flowering, may be started now. Put the roots into pots, and give them a warm situation to forward them.

Verbenas will begin to bloom the latter part of the month. Those that require it should then be repotted.

Cactuses will still require but little water. If, however, any plants should show the buds very prominently, they may be watered, to force them into bloom, if it is desired.

Tree Pæonies may be brought in for a succession of flowers.

Amaryllises should be potted now, particularly those which show buds.

Ericas coming into flower should receive due supplies of water, and be placed in the coolest and most airy part of the house.

Annual flower seeds, for blooming early, may be planted this month in hot beds.

VEGETABLE DEPARTMENT.

Hot-beds for early cucumbers, radishes, &c. should be made up this month. One small frame, of one light, will be sufficient to raise cucumber plants for several large frames. They should be potted into No. 2 pots when in the seed leaf, three in each pot. They may remain thus, until the large frames are made up for hilling out.

Radishes, *Lettuces*, *Peppergrass*, &c. may be planted now in hot beds.

Rhubarb may be brought forward in the green-house, by having the roots planted in large pots.

THE MAGAZINE OF HORTICULTURE.

FEBRUARY, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Repletion; a disease incident to the culture of the Tuberose, (Poliánthes tuberosa.)* By JOHN LEWIS RUSSELL, Professor of Vegetable Physiology to the Massachusetts Horticultural Society, &c.

THIS stately and exquisite flower, deservedly a favorite of the florist, and for so many years attracting undiminished attention from the lover of choice plants, is too well known to need a description of its merits, or of the structure of its form. The variety most cultivated is the double or multiplex petalled, and first known in Europe, being grown for many years in only one garden, that of M. de la Court, at Leyden; its confinement to that spot being rendered effective by the annual destruction of its numerous offsets. Indeed, the original species and type is so seldom seen, that, among the thousands which have fallen under my observation, for many years past, cultivated in the gardens of amateurs and florists, but one specimen of the true *Poliánthes tuberosa*, with single and simple corollæ, has occurred.

Having had an opportunity of rearing a promising plant of the double variety this past summer, in lieu of better information I followed the directions laid down in practical treatises concerning its culture. Nothing could have exceeded the strength and vigor and promising appearance of my favored and carefully tended pet. Indulging myself in the hope that my assiduity would be rewarded by a richness of foliage surpassed

only by the altitude and beauty of the spike, which seemed to give evidence of such a disposition to fulfil my anticipations, I had the misfortune to discover, at the critical moment of its extension for speedy bloom, that an insidious disease had struck a fatal blow on the hitherto green and rich foliage, which gracefully bent in perfection over the pot; the ornament of my casement, and the attracting object of the casual observer. Detecting it in its first approach, I had an excellent opportunity of marking its progress and its effects. At first a single leaf was affected in its centre, perceived by the withering of that portion. On the next day two or three more were similarly attacked. A day after, and nearly all were in the same condition. Satisfied that no insect had committed these ravages, I was led to a microscopic investigation, in order, if possible, to trace the inward and physiological source. The epidermis, or covering of the upper side of the leaf, was dry and withered, and this extended as far as the disease seemed to affect the portion of the leaf. Its color was perfectly white, and similar to satin. The epidermis of the under surface was less dry and withered. The parenchyma, or pulp, was more or less destroyed, and all that sustained the remnant of the leaf was a narrow line of healthy matter on each side of the central withered portion. Irregular, transverse dark lines were apparent through the epidermal tissue. Submitted to a powerful lens, they were ascertained to proceed from ruptures of the internal vessels, which permeate the parenchyma.

The perspiration of plants is a well known law of vegetable economy. In most instances this is imperceptible, although very apparent in some remarkable cases. In endogenous plants, to which group belongs the subject of this memoir, this perspiration or exudation is effected generally at the tip of the foliage. Excess of nourishment is as prejudicial to the plant as to the animal. If by any cause the plant cannot dispose of its superfluous supply, the structure, unable to meet such fearful exigencies, becomes diseased, and incapable of its healthy and natural function. This, I had reason to think, was precisely the case in this instance. Erring in following too literally the injunction "to water freely" on the swelling of the buds, repletion was the ultimate effect. Rendered more cautious by a detection of the mischief, I was, by a more spare application of water, enabled to bloom my specimen with tolerable show, although so sadly disfigured in foliage. From such experience it may not be too bold to presume that the tuberose does not require that free watering hitherto recommended. Somewhat succulent in its structure, it is capable of resisting much more

heat and dryness than might be supposed. Further experiments on this interesting subject may perhaps develop important facts, which shall serve as hints to the florist. Many of the prescribed rules for floriculture are exceedingly objectionable, because derived more from traditional knowledge than from constant experiment; while it is evident, to insure complete success, a philosophical and inquiring spirit should be the highest teacher and guide.

ART. II. *Pomological Notices; or Notices respecting new and superior varieties of Fruits, worthy of general cultivation.* By the EDITOR.

SINCE the spring of 1837, very few fruits have come under our notice, which have demanded any particular attention. Mr. Manning's excellent article, in Vol. III., describing upwards of one hundred and twenty pears, included most of the new and superior varieties of that fruit; and but few kinds, not there named, have since produced specimens from which any accurate information could be ascertained of their real excellence. Our notices in Vol. IV. embraced a variety of miscellaneous fruits.

During the three past years not so large a number of new fruits have been imported; previously to that period almost every variety supposed to be new and valuable, in either the English or French collections, was sought out and introduced; besides these, Dr. Van Mons contributed largely of his stock of seedlings, to enrich and extend our collections. Very few, however, of the latter have yet come into bearing; and it will be some time ere their true character and value shall become known. Mr. Manning had many new varieties in bearing the past summer, and he anticipated the pleasure of proving their excellence and describing their qualities; but the storm of the latter part of last August was very severe in Salem, and nearly all those varieties, whose maturity he had watched with much anxiety, were blown off the trees before they had attained to half their size. The expectations of a whole season were destroyed in a moment, and it will be another year, and, unless a favorable season, perhaps two, before the opportunity will again be afforded, of ascertaining the excellence of those which fruited the past season.

The accessions of new and superior varieties of fruits to our gardens must be, necessarily, slow. The addition of new names is of little value, and in the present rather confused nomenclature of fruits, it is better to proceed carefully in introducing new kinds, than, by needless haste, plant those which a year or two will reveal to be only old varieties, of which we have an abundance already, or new sorts less worthy of growth than such as we previously possessed. Much disappointment has been caused by the innumerable synonyms which abound in fruit catalogues; and we have known instances where a good variety had been engrafted on a poor and worthless one, and where the cultivator, possessed with considerable zeal, and anxious to buy every new sort, had regrafted the same, and finally introduced the identical old and original variety which the tree first produced! We would not, by any means, be understood as disapproving of the introduction of supposed new varieties; but we would caution those who are desirous of possessing the new and finer kinds, to proceed with care, in order that frequent disappointment may not dampen or wholly destroy the zeal of cultivators. We have thrown out these hints, because we think the confused state of the nomenclature of fruits demands that more than ordinary pains should be taken when selecting an assortment of fruits for a garden.

Several new kinds of pears have been exhibited at the Massachusetts Horticultural Society's room, the past season: we shall first mention them, giving some account of those of which we have any knowledge; we shall then notice some fruits which have lately been raised from seed, or introduced into English collections.

Beurré Bronze.—This variety is not named in the London Horticultural Society's *Catalogue*. It was exhibited by the Hon. John Lowell the past autumn, and proved to be a first rate pear. Mr. Manning also exhibited it, but under the name of Fourcroy and Fig of Naples. The Fig of Naples is described by Mr. Manning, Vol. III., p. 48, but the name should be cancelled, and *Beurré Bronze* take its place. Mr. Manning states that he does not find the *Beurre Bronze* described by any pomological author; and also remarks that it deserves to be extensively disseminated. Under the name of *Figure of Naples*, it is well known in the vicinity of Boston.

Reine Caroline.—Exhibited by Mr. Lowell. It had not fruited when the London Horticultural Society's *Catalogue* was published, but it proves to be a very fine fruit; it is of good size, and in eating the latter part of October.

Delices Charles—also exhibited by Mr. Lowell, and likewise undescribed by Mr. Thompson in the above *Catalogue*, of handsome appearance and excellent quality. Ripe in November.

Beurré Capiaumont.—There has been some discussion respecting this variety; a few years since, a fine looking pear, now ascertained to be the *Roi de Wurtemberg*, was received as the *Capiaumont*, but it did not resemble the figure of the latter variety, in the *Pomological Magazine*, and its identity was doubted by Mr. Manning: after some time, it was ascertained by him that it was not the *Capiaumont*, but the *Roi de Wurtemberg*. Mr. Manning then made exertions to procure the *true Capiaumont*. The grafts were received from Mr. Thompson, of the London Horticultural Society's Garden; and these came into bearing, for the first time, in 1838, and the size, form, and quality of the fruit were such as to leave no doubt that it was the *Capiaumont*, of the London Horticultural Society's *Catalogue*, and of Van Mons. The trees have again fruited the past year, and fine specimens were exhibited at the annual exhibition of the Massachusetts Horticultural Society, by Mr. Ives, of Salem. It is a first rate pear. The *Roi de Wurtemberg* is a handsome fruit, but much inferior to the *Capiaumont* in quality.

Beurré Seatın, one of Van Mons's new varieties, the grafts of which were received directly from him, was exhibited the past month by Mr. Manning. It possesses excellent qualities, and Mr. Manning thinks it is one of the best of the seedlings which Van Mons has raised. We hope to give our readers some account of it from Mr. Manning.

The Duchess d'Angouleme, has produced abundantly the past year in the collections of many cultivators. Specimens, of handsome form, weighed from seventeen to twenty ounces each. It is a variety deserving of general growth. Dwarf trees on quince produce large and handsome fruit.

Michaux.—This is the name of a new variety, which we observed the past fall in the nursery of Mr. Ives, of Salem; it was not then near ripe; if it has proved good, we trust Mr. Ives will send us some account of it.

Fullon.—We have remarked, while noticing the collection of fruits in the garden of Mr. Manning, the past autumn, (Vol. IV. p. 407,) a peculiarity of this variety, first discovered by him the past year. This is, that the fruits, after they have attained half their size, are in a good eating state after they had laid a day or two. Every fruit blown off, after laying two

or three days to mature, is perfectly mellow, and but little inferior to a full grown and ripened fruit.

Feast's Seedling.—While on a visit to Baltimore, we called upon Mr. Samuel Feast, of that city, some notice of whose garden will be found in our last volume, (p. 371.) Mr. Feast presented us with specimens of a new seedling pear, raised by him a few years since from the Seckel. It is quite different from that excellent variety in color, shape and flavor, but it nevertheless promises first rate qualities. We took some of the specimens, intending to describe it when we arrived home; but being detained beyond our expectations, on our way, and the fruit somewhat over ripe, we were not enabled to keep them. The variety is larger and longer than the Seckel, with a pale green skin, rich melting flesh, with a delicious flavor, and ripe in August. It is one of the best early autumn pears we are acquainted with.

In addition to these, we have some information on several other varieties to offer, in a future article. We shall now notice some kinds upon which we find remarks in the English periodicals.

Beurré Spence.—Nothing is yet known of this fine variety in England, although considerable pains have been taken to introduce it. Mr. Thompson remarks, that an excellent pear was seen the past season, under the name of Beurré Spence, but it was believed to be the Urbaniste. It seems singular that to this day it has not been added to English collections.

Mollett's Seedling Chaumontel.—A variety under this name has been exhibited before the London Horticultural Society. It bears considerable resemblance to the old Chaumontel, in appearance and flavor.

Shobden Count Pear.—Raised by the late President of the London Horticultural Society, Mr. Knight. It is a fine variety, possessing a flavor partaking of that of the melon and the pine apple.

The Fortunée Belge is the same as the *Fortunée de Parmentier*.

The Colmar Niell, is stated to be a most excellent pear, surpassing several of the new varieties.

The Althorp Crassane, one of Mr. Knight's new pears, is recommended by Mr. Thompson to take the place of the Beurré Diel, where the latter does not thrive. The former, being an English variety, is extremely hardy, as well as a first rate fruit. It ripens from December to the end of January, somewhat according to the favorableness of the season. The tree bears well.

The Chaumontel Swan's Egg.—Raised by Mr. Williams, of Pitmaston, from seed of the Chaumontel, impregnated with the pollen of the Swan's egg. A middle sized, obovate fruit, with a short stalk, a large open eye, a russet skin, and a rich sugary flavor. It bears well as a standard, and is in season in the end of October. The tree grows with upright branches, like the Swan's egg.

Variety (unnamed).—Raised by the same gentleman from the seed of the green Chisel and pollen of the Poire d'Auch. It does not appear to possess merit of the first kind, the flesh, though sugary, being rather gritty. Mr. Williams found it, however, to succeed well on a north wall, when it ripens about the end of September, succeeding the Jargonelle.

Van Mons Leon le Clerc.—In our last volume, (p. 304,) we noticed this new variety which has lately been brought into cultivation. There is an old variety called Leon le Clerc, which has led to some confusion in the sale and dissemination of the two kinds by English nurserymen. The old variety, under this name, which has been cultivated for many years, is a totally different fruit from Van Mons Leon le Clerc: the former being only a stewing pear, with a tough flesh, while the latter is one of the richest beurrés.

It was first introduced, we believe, into England, by M. René Langlier, of Jersey, and was advertised and sold by him at a high price: another nurseryman, in the same place, having a pear by the same name, offered his at a much lower rate, and sold a number of trees to those who thought M. Langlier's price exorbitant: this gave rise to a discussion between the two nurserymen; M. René Langlier contending that he, only, had the *true* Leon le Clerc. But as the other nurseryman received his trees from one of the best sources in Paris, he was confident he sold the identical fruit. A correspondence took place, and the whole matter in dispute was left to a committee of the Jersey Horticultural Society. After looking into the affair, this committee discovered that M. René Langlier's Leon le Clerc was a new and entirely different fruit from the other, and that he alone was in possession of the true variety.

This variety originated with M. Leon le Clerc, of Laval, a celebrated cultivator, and named Van Mons Leon le Clerc, in honor of Dr. Van Mons's eminent services in pomology. The variety was not sold to the trade; but M. René Langlier, of Jersey, from some cause, probably personal friendship, was made the sole possessor of the variety in England, before it was known to the trade in France; and as there was a Leon le Clerc raised by Dr. Van Mons himself, and called a fine pear,

nurserymen, who saw M. Langlier's advertisement of this new pear, at one guinea each tree, immediately wrote to France to procure it: in all cases Van Mons's Leon le Clerc came to hand, but *not* Van Mons Leon le Clerc,* raised by M. le Clerc. M. le Grandais, a celebrated nurseryman of Avanches, wrote to M. Leon le Clerc for information respecting the pear bearing his name, but the latter, supposing he alluded to Van Mons's seedling, and not his own of the same name, which was not then for sale, wrote in return, that it was a first rate pear, keeping for a long period, and of an agreeable flavor. M. le Grandais wrote to his correspondents in England, that he had corresponded with M. le Clerc, and received a description of the pear, together with branches of the tree, the better that he might know if those which he had sent to England were true; they proved identical. With this confirmation, Van Mons Leon le Clerc pear was advertised at 2s. 6d., while M. Langlier was selling his at one guinea. To settle the affair, it was left to the Jersey Horticultural Society, and they decided as we have stated above. We have deemed this explanation necessary, that amateurs and nurserymen, ordering this variety from abroad, may look out and secure the *true* Leon le Clerc. Probably no one has it for sale in England, but M. Langlier, of Jersey, and in France, but the raiser of the variety, M. le Clerc. Specimens of the fruit were exhibited before the London Horticultural Society, by M. Langlier, in December, 1838, and we find the following note upon the same, by Mr. Thompson, recorded in the *Gardener's Magazine*.

"The most important variety exhibited in the collection of M. Langlier, is a pear called Van Mons Leon le Clerc, raised by M. Leon le Clerc, of Laval. It is a fruit of an oblong form, about four inches in length, and nearly three inches in diameter. The eye is shallow, small, but open; the stalk rather more than one inch in length, moderately strong, and inserted obliquely; the skin yellowish, every where profusely covered with brown, which, near the stalk, amounts to a sort of russeting. The flesh is yellowish white, buttery and melting, with a very rich sugary flavor. It proves a pear of first-rate excellence, combining the properties of large size, handsome appearance, and rich flavor."

M. René Langlier is a nurseryman at St. Hiliers, in the Island of Jersey. We hope it will soon be introduced to our collections.

* M. Leon le Clerc, of Laval, wished the name of Van Mons to be conjoined with his own, in the name of this fruit.

Mr. Rivers, nurseryman of Sawbridgeworth, has communicated some information on several varieties of pears in the *Gardener's Magazine*, from which we condense the following:—

Beurré de Ranz (not Rance, as it is commonly called, and so named in Mr. Manning's article, Vol. III., p. 50,) proves to be one of the hardiest of the Belgian varieties, and bears most abundantly as a standard. The last season, owing to the cold and wet summer of 1838, the pears were in perfection in January, and are stated to have been more juicy and high flavored than usual. They were gathered from young standard trees, growing in a warm, sandy loam, with a pure sandy subsoil. In 1838, the fruit remained in perfection as late as July.

Hacon's Incomparable.—Much has been said of this variety; the same writer calls it one of the finest pears known. In 1838 the fruit ripened early in December, scarcely keeping till Christmas, from young standard trees. No fruit can be more delicious from standards. The fruit is long and handsome, as full sized winter Crassane pears, and much like them in shape and color. The tree is pendulous, and very hardy and prolific. Mr. Manning, we believe, has fruited it.

Bon Chrétien Fondant has proved soft, dry and worthless in the climate of England. It is an early bloomer, and subject to be cut off by spring frosts.

The Aston Town Pear proves to be a most excellent variety; juicy, melting and high flavored. Fruits well as a standard, and is a hardy and prolific variety. This has not yet been fruited in this country.

Comte de Launy is also a most excellent variety, remarkably full of a sugary, refreshing, juice. It is also a very hardy sort, withstanding the sharp frosts of spring better than most varieties. Not yet added to our collections.

The Easter Beurré has failed three successive years with the writer, near London. The opposite result has been the experience of Mr. Manning: with him it is a great and constant bearer.

Beurré Diel, in spite of the unpropitious season of 1838, ripened well from standards. For those who like a musky perfumed pear, this is good. It is more hardy than the Easter Beurré.

Louise Bonne, of Jersey, is stated to be a November pear, juicy and high flavored. In 1838, the writer gave it unqualified praise, as the fruit was quite delicious. In the climate of England it blooms too early for cold springs. Mr. Manning thinks highly of this sort.

The Beurré de Capiaumont may be called the Hawthorndean, (alluding to the well known prolific nature of the apple of that name) of pears. It bears abundantly at all ages, every where, and under any circumstances, and, for October, is a handsome and delicious pear. For pot culture it is invaluable, producing freely when so planted.

Beurré Bosc is not an abundant bearer while the tree is young, but a highly flavored and delicious pear. In eating in all November. Mr. Manning's remarks are, that it produces "early and plentifully."

Thompson's Pear, for an autumnal variety, is stated to be quite worthy of cultivation. The fruit is remarkably juicy and high flavored, and fit for the table the whole of November. Like most of the new English seedlings, it is very hardy; the trees, even in the coldest soil, grow freely, without canker.

The Winter Nelis is stated to be, like Hacon's Incomparable, deserving a situation by every owner of a garden. No pear can be more delicious the whole of January. Mr. Manning has already recorded his opinion of this fine sort in our pages, (see Vol. III., p. 47,) which coincides exactly with this writer.

The Althorp Crassane nearly approaches the Winter Nelis in excellence. The tree is inclined to be thorny, but is remarkably hardy, and bears well. It varies in its time of ripening, from early in December to the end of January.

The Glout Morceau, the last two seasons, have not had flavor, owing, probably, to the want of sun. The writer thinks the variety inclined to be tame and insipid. It is, however, a robust tree, even in the most cold and clayey soils. Mr. Manning has described this variety, (Vol. III., p. 45,) and at that time did not consider it a first rate fruit, but subsequently he has noted it in his *Book of Fruits* as "juicy and excellent."

The Winter Crassane is thought to be one of the hardiest and most prolific pears known; but it is not of first rate excellence. But as it keeps well till February, though not very juicy or high flavored, it deserves to be planted, especially in soils unfavorable to fine sorts.

The writer, in concluding his notice of the above new pears, remarks, "that, as the period of ripening the Flemish, and new pears in general, vary so much in different sorts, situations and seasons, it will be interesting to hear from different correspondents their opinions, always stating the soil and the situations of their trees." The trees on which his fruit grew are in a sandy loam, and the subsoil is a sileaceous sand.

The suggestion of the writer is a good one, and we would recommend his remarks to our correspondents, and all cultivators of new varieties of pears, and indeed of all kinds of fruits,—plums, apples, &c. &c. The importance of contributing such information, must be apparent to all: it would lead to the most useful results, and have a beneficial influence in the introduction of suitable varieties upon proper soils.

There is, without doubt, a manifest difference in the habits and character of different varieties of pears, some growing and producing well in moist soils, with a wet sub-soil, while others would scarcely subsist in the same situation: some varieties will grow freely, and bear well in a light loam, with a dry subsoil, while, in a soil directly the reverse, the growth would be stunted, and the fruit worthless. We would also advise the propriety of naming the stock; whether quince or free—and likewise the habit of the trees, whether standards or half standards, or dwarfs—whether trained to an espalier or a wall. Such information would not fail to give to the grower of fruits, who is desirous of adding new sorts to his collection, a better knowledge of their real merit, than can be obtained from all the mere descriptions which have ever been written.

We throw out these hints, that our readers may reflect upon them, and we shall be happy if they are approved of and complied with through our pages. Our only object is to collect information which will diminish the risk of adding new varieties of pears to our gardens; and the less the number of obstacles in the way of this, the more rapidly will they be disseminated.

In our next, we shall offer some remarks on a variety of plums and other fruits.

ART. III. *On Flower Beds.* By M. A. W.

THE laying out of a flower knot, or system of beds in a flower garden, is one of the first seats in which the young gardener undertakes to show off his abilities; and being one which affords the most ample scope for the play of fancy, is therefore, perhaps, the one in which he is most likely to manifest the display of a bad taste. Even where the design is of the most happy conception, and the plotting beautiful upon paper, the difficulty of defining and preserving accurately the outline of the

figure, when practically applied, will often quite destroy the anticipated pleasing effect. Edgeboards of wood, so thin as to be easily bent to the required form, are commonly the first material employed. These are soon warped out of shape, or quickly rot, and impart a deleterious principle to the soil in contact with them; and a very common fault is to have them too wide, so that the plants in the beds suffer from drought, while the paths between them resemble gutters more than walks for pleasure.

Bricks, or tiles moulded expressly for the purpose, are next resorted to, and if sunk so that the earth in the beds shall not be more than from one to two inches above the level of the paths, they serve pretty well for some time. But so soon as they begin to crumble from the influence of frost, or are covered with green mould or moss, as they soon will be in moist or shady exposures, they become offensive to the eye, though not, like the first, injurious to the soil. A living margin, therefore, becomes the next and last expedient; and indeed it may be regarded as one of the last steps in the march of horticultural refinement. To adapt such a line of vegetation to the size and form of the bed, and make it harmonize in every point of reference with the group of plants within, requires a cultivated delicacy of perception, a sound judgment, and an accurate knowledge of all the principles of natural and gardenesque beauty, as well as of the characters of the plants or materials which are necessary, with a due arrangement, to produce it.

It is probably as difficult to fix upon the most suitable plant for the edging of a flower bed, as it is to determine the best shrub for a hedge around fields. For the borders of main avenues, or broad walks in grounds of considerable extent, box, as recommended, Vol. V., p. 350, is undoubtedly the best; but for small parterres, or the flower beds in a front door yard, it seems much less suitable. They can commonly be taken in at one glance of the eye, and, notwithstanding all that has been said of the artificial or geometric style, it is the proper one for such places; for symmetry, or a perfect balance of corresponding parts, greatly strengthens the impression of such a scene, taken as a whole, or single mass of objects. The beds, therefore, will not only be small, but when there is the proper variety in the form of them, some, at least, must have quite acute angles. Box, if thrifty, (and, sickly, it would be an eyesore any where,) soon takes up too much space in breadth; it becomes a harbor for slugs and other noxious vermin; and its numerous, greedy, fibrous roots so exhaust the soil, that no bulbous or other *flowering* plants, which are the primary objects

in such situations, can flourish within a considerable distance. To be kept within the proper dimensions, both as to height and breadth, it requires frequent clipping, and for some time after that operation it presents a raw, stiff and unpleasant aspect; though, to be sure, after the new growth has concealed the cut extremities, it will present a most charming line of verdure. Box is, moreover, apt to be winter killed at the north, and summer killed at the south; and it will also not unfrequently die off in some places without any obvious cause, leaving unsightly gaps, which it is impossible, or requires a long time, perfectly to fill.

Dwarf iris, hyssop, some species of phlox, stone crop, and even a few kinds of grass, are, for a time, exceedingly pretty; but they soon spread too much laterally, while, from pressure or old age, or exhaustion of the soil, they die away in the middle of the line. Certain sorts of bulbous roots, such as the crocus, jonquil, and other *Narcissi*, hyacinths and the like, with their brilliant flowers and lively foliage, leave nothing further to be desired, while they last; which is but for a brief space in the spring, and we can only supply their place by a row of some annual, such as Chinese pinks, sweet alyssum, candytuft, &c., which, in their turn, must give way to China asters. And, upon the whole, perhaps no single plant whatever can fulfil all the requisite conditions, viz., a narrow and low line of perpetual green, diversified with flowers, to delight us with the contrast of their colors or the deliciousness of their perfume. A new charm would be added, if we could procure a successive variety of these; for what is likely to meet the eye several times every day, for months together, will soon lose its effects from monotony. We must, therefore, have recourse to a combination of several kinds, which will vegetate and flower in succession, without interfering with each other, upon the same ground.

A few years ago, I commenced the trial of a plan, which has succeeded so well thus far, that I now recommend it to the attention of others, especially to those of the middle and southern states; while an analogous course with more hardy plants may succeed better at the north, though I think, with the protection of a bed of leaves, the same would withstand the winter in the vicinity of Boston. I planted in the same line, and so close as almost to touch each other, one bulb of each repeatedly, three kinds of *Amaryllidaceæ*, of nearly the same habit, and which multiply by offsets so fast, that they can be easily obtained in sufficient quantity, viz., *Zephyránthes Atamásco*, *Z. rósea*, and *Sternbergia lútea*. Early the next spring, my row of atamasco flowers, of the most brilliant white changing

to pink, was the admiration of every passer-by. They continued to push forth for several weeks, and, for a considerable time after their leaves formed as fine a margin of green as one could wish to see. These leaves had scarcely begun to die away, when the flowers of the *rosea* began to appear, and kept flowering nearly all summer. The leaves lasted till late in the fall, when the crocus-like golden flowers of the *Sternbergia* took their place, and had a doubly cheerful effect from all the adjacent vegetation having fallen into "the sere and yellow leaf." These flowers, it is true, were more transient than the others, continuing perhaps for eight or ten days, but they were immediately followed by their peculiarly rich green leaves, which preserved the border fresh and perfect, till the *atanasco* appeared again. The second year the edging was very much more beautiful, from the flowering bulbs having increased three fold. How long they can be permitted to remain without being dug up and reset, I know not yet, probably from three to five or six years; but if it were required to be done every year, it would be well worth the trouble. At any rate, I know of no better way of obtaining the combined grand desiderata in an edging for flower beds, viz., humble growth, perpetual *greenth*,* and variety in the color of a succession of flowers. I only regret that I cannot say much about their perfume.

M. A. W.

Athens, Ga., Dec. 1839.

ART. IV. *Observations on the Camellia, and its varieties, with some account of its introduction into Great Britain and this country.* By M. P. WILDER.

(Continued from Vol. IV., p. 101.)

I RESUME the article on the *Camellia* and its varieties, (see Vol. IV., p. 101.) The great increase of new sorts by hybridization, with some importations from China, have so multiplied the tribe, that were I to describe the habit, foliage and flower, of each kind, I fear I should attempt more than my leisure would permit, and that I should occupy more space in the columns of your Magazine than you could devote to any one subject.

* I use this very convenient word on the authority of Horace Walpole's Letters, where it occurs more than once.

The love for the camellia has become universal. Some of the most distinguished horticulturists of the day have abandoned the cultivation of all other plants, and given themselves exclusively to the care of this lovely genus; and what plant is there, that so well repays the labor and cultivation that may be lavished upon it?

Elegant colored drawings, true to nature, have, from time to time, appeared from the hands of the artist, and treatises from the pens of the most experienced amateurs and cultivators of Europe. These give, not only particular directions for the treatment of the camellia, in all its stages of growth, to its propagation, fertilization, and maturation of the seed, but also minute descriptions of each individual variety, origin, &c.

Among the latest publications are the *Monography and Iconography of the Genus Camellia*, by the Abbé Berlèse, Paris. This eminent and worthy horticulturist has devoted more than twenty years of his life to the observation and nurturing of the camellia, and has thus communicated to the public his valuable experience. To these works, and those to which I have alluded heretofore, I refer all the lovers of this superb plant, confining myself, principally, to a description of the flower of such varieties as I shall notice, and to the origin of the plant where known.

78. *Camellia japonica* var. *Aitônia*. *Chand. & Booth's, Ill.*
Syn. *Amplissima*. Abbé Berlèse Monog.

A very large, and broadly expanded, single, rose-colored flower, five inches in diameter. This variety produces seed readily, and from it some good sub-varieties have been raised.

79. *Camellia j.* var. *Wiltôni*. *Chandler & Booth's Ill.*
Syn. *Lady Wilton's Camellia*.

Fasciculâris. French Catalogues.

A small, neat, variegated double camellia, from two to two and a half inches in diameter, of the color of the double striped, and resembling it in miniature. It is a free flowerer, and of compact habit of growth.

80. *Camellia j.* var. *Fördii*. *Paxton's Mag. Bot.*

This camellia is of exquisite formation and of unrivalled perfection; the size of the flower is three and a half inches; the color a brilliant rose; all the petals being arranged with the utmost regularity throughout. The origin of this variety has already been noticed, Vol. I., p. 116.

81. *Camellia j.* var. *Lindbria*. *Fr. and Eng. Cat.*

Flower above medium size, double but not full; petals long and broad, of good form; color cherry red, with stripes and spots of white. This is frequently very beautiful.

82. *Caméllia j. var. spofforthiana. L'Abbé Berlése Monog.*
Syn. Spofforth striped. French and English Cat.

Flower clear white, with some stripes of rose; very large and full, of the form of *anemoneflora alba*, but much better. Raised by the Rev. Mr. Herbert, Spofforth, Eng., from the single white, by Pompone.

83. *Caméllia j. var. spofforthiana rosea. Eng. Cat.*

This was also raised by Mr. Herbert, and said by him to be of the form and color of pæony flowered, but superior to both.

84. *Caméllia j. var. Tamponedna, L'Abbé Berlése Monog.*

Flower of medium size, double, petals somewhat irregularly arranged, but of good form; color, cherry red, and spotted with white.

85. *Caméllia j. var. Chandler's élégans. Fr. Cat.*

86. *Caméllia j. var. Roulini. Fr. Cat.*

87. *Caméllia j. var. pulcherrima. Fr. Cat.*

See No. 18, *Caméllia j. var. élégans Chandler*, (Vol. II., p. 94.) Nos. 85, 86, and 87 are synonymous with that variety. A letter from a correspondent, in Germany, speaks of the *élégans* as the "always splendid *élégans*," a reputation which it fully deserves. No variety can scarcely excel it.

88. *Caméllia j. var. Landrethi. American Catalogues.*

Mr. Landreth's Camellia.

This camellia was produced from seed, many years since, by the Messrs. Landreth, of Philadelphia, and for a while called *C. Jacksonia*, and I have noticed in a list of new camellias recently published in Harrison's *Floricultural Cabinet*, a variety under the latter cognomen, the description of which corresponds to that of *C. Landrethi*.

The flower is of medium size, perfectly round and full, of a very delicate rose color, all the petals being arranged in the most admirable manner. Nothing can exceed the regularity and perfection of this lovely variety, a symmetrical beauty. It is figured in a floricultural work published by Messrs. Landreth, some time since, but the plate does not do justice to the variety.

89. *Caméllia j. var. amabile (Smith's.) Am. Cat.*

This variety was raised by that distinguished amateur, J. B. Smith, Esq., of Philadelphia. This gentleman has had great success in producing new varieties from seed, and is constantly adding great novelties to the tribe. The flower is of the most perfect formation, all the petals being imbricated with great regularity in the shell form. The color is a deep rose, with a lighter shade towards the centre.

90. *Caméllia j. var. E'stherii. Am. Cat.*

This is also a seedling of Mr. Smith's, and he considers it one of his best productions. The flower is quite large, five inches in diameter, full and round, somewhat after the form of *C. punctata*. The color is a pale blush, nearly white, with stripes and spots of rose. A very desirable sort.

91. *Caméllia j. var. Práttii. Am. Cat.*

A Philadelphia seedling, by R. Buist. This is a *camellia* of great merit, and has already found its way to Europe. It is of the most beautiful formation, the petals gracefully imbricated, and most of them marked with a shade or stripe of white down the centre. It should be in every collection. Named in honor of the late Mr. Pratt, of Lemon Hill, near Philadelphia.

92. *Caméllia j. var. Sherwoodii.*

This is also a new variety, obtained from seed by Mr. Sherwood, of Laurel Hill, Philadelphia. The flower is three and a half inches in diameter; round, perfectly regular in its formation; the petals very numerous, and all laid over each other to the very centre, after the manner of the old double white. The color is a dark rose or crimson. This is the *first* seedling Mr. S. has given a name, and it is truly a valuable sort.

93. *Caméllia j. novaboracéncis, or New York. Floy's Cat.*

A seedling of Mr. Floy's, of New York, which made its debut about the same time with that giant of the genus, *C. var. Flóyii*. It is a variety of undoubted merit; the flower is bell shape, very large, five inches in diameter, of a beautiful orange red color; the petals are long and broad, those of the centre frequently marked with faint stripes of white; some stamens. This *camellia* is worthy of a place in the most choice collection. It is to be regretted that Mr. Floy's attachment to his seedlings has prevented a more general dissemination of them.

94. *Caméllia j. var. Donckelaéri. Edward's Bot. Register. Mr. Donckelaer's Camellia.*

Of all the *camellias* that have recently come to our notice, this, in my estimation, is the most magnificent. It is a true Chinese variety, brought out with several other fine sorts, by Dr. Van Siebold, to Germany. The flower is four inches in diameter, not quite full, but of a most beautiful form. The color is a bright crimson, almost scarlet, and superbly maculated with white. No collection can be complete without it.

95. *Caméllia j. var. picturàta. L'Abbé Berlése Monog.*

A much esteemed variety, somewhat of the character of

Press's eclipse, but larger and better. The flower is above medium size, full and round; color clear white, with stripes of rose.

96. *Camellia j. var. delicatissima. Abbé Berlése Monog.*

The form, color, and size of this flower is much like the last named variety, but not so frequently spotted with rose, and sometimes scarcely at all. It is of equal merit.

97. *Camellia j. var. imperialis. Fr. Cat.*

98. *Camellia j. var. adonidea. Fr. Cat.*

99. *Camellia j. var. regina gallicarum. Fr. Cat.*

100. *Camellia j. var. Preston eclipse. Fr. Cat.*

The four last named, Nos. 97 to 100 inclusive, are all synonyms, with *C. j. var. eclipsis*, already described under No. 26, (Vol. II., p. 95.) These names have been given to this variety by the French nurserymen.

101. *Camellia j. var. nobilissima. Abbé Berlése Monog.*

Flower of the purest white, three to three and a half inches in diameter, of the Pomponne form, but much more regular and beautiful. A fine new sort.

102. *Camellia j. var. candidissima. Abbé Berlése, Monog.*

A Chinese variety, of medium size, not so large as the *C. álba pléna*, but of the same color and form. The petals are equally as numerous, and as perfectly well imbricated and arranged. It is figured in Smith's *Florist's Cabinet*.

103. *Camellia j. var. triumphans. Abbé Berlése Monog.*

Flower large and full, of a fine blush color, shaded with delicate rose; of good form, with the petals imbricated and well arranged. From my own experience I am inclined to think it will be a variety, the flowers of which will not open very freely.

104. *Camellia j. var. imbricata álba. Abbé Berlése Monog.*

White imbricated Camellia.

This camellia is one of the modern English hybrids, and is a good acquisition. The flower is double and full, spherical in form, and of free inflorescence; the size is about three and a half inches in diameter; the color white, with distinct, and, sometimes, broad stripes of rose. This variety is now in bloom in the collection of J. W. Boot, Esq., Boston.

105. *Camellia j. var. Chándleri striata. Fr. Cat.*

This variety, as well as the *C. j. var. Sweetii* of the *French Catalogues*, noticed under No. 64, (Vol. III., p. 99,) is no other than the *C. var. Chándleri*.

M. P. WILDER.

Hawthorn Grove, Dorchester, Jan. 1840.

REVIEWS.

ART. I. *Address of the Hon. Judge Buel. Delivered before the Agricultural and Horticultural Societies of New Haven Co., Sept. 25, 1839. Pamphlet, 8vo. pp. 35. New Haven, 1839.*

IN our last number we briefly noticed the last work of Judge Buel, the *Farmer's Companion*. Appended to that volume was the Address at the head of this article; but as we had not room to speak of it so fully as we desired, we made no mention of it, intending to refer it to another time.

The author has, during the last four or five years, delivered several agricultural addresses before various societies in New York, New Jersey and Massachusetts, each of which have been interesting productions. The present Address, however, is of greater value than any other which he has ever written. It is, indeed, the best, as it probably was the last, effort of his pen, and it was most deservedly added to the practical Essay, which, we have already remarked, was the most valuable book that could adorn the library of the farmer.

It was during a tour to New Haven, to deliver this Address, undertaken with the sole hope of benefitting the agriculture of Connecticut, that the amented author was seized with illness, which terminated so fatally. Unable to perform the duties which he had intended, the Address, by the permission of the author, was read to the numerous assemblage, by one of the committee of the New Haven Agricultural Society. His illness was not then serious; but before a week had passed away, he, who set out from home, with high hopes of rendering an important service to the noble profession for whose welfare he so industriously labored,—of benefitting, so far as lay in his power, the interest of the American husbandman,—and of improving the social and moral condition of society,—was called from his labors, and numbered among the dead.

The Address was delivered before the members of the Agricultural and Horticultural Societies united, and both agriculture and horticulture receive a due share of attention. The whole is so interesting, that we scarcely know what portions to extract, but, as we cannot exceed the bounds of a review, we shall confine our selections to a few of the most valuable paragraphs.

The author commences by alluding to the utility and importance of agricultural and horticultural celebrations, and notices several societies whose efforts have been crowned with complete success by the means of their annual exhibitions. They tend to awaken and create a new interest—they excite many to renewed industry, who, fancying that they had arrived at a high degree of perfection, discover that there are others who excel, and, by bringing together annually the cultivators of the soil, they are the means of diffusing a vast deal of useful and valuable information, which cannot be obtained from any other source. When properly conducted, great benefits to society will be the result. The author justly remarks:—

With regard to the utility of agricultural and horticultural societies, much will depend upon the objects which bring together their members. If they associate for selfish purposes, merely to monopolize the spoils, and withdraw whenever they are disappointed in their sinister hopes, jealousies and apathy will ensue, and the association will fall, as many under like circumstances have fallen, without public loss or public regret. But if the association is formed for mutual improvement, and in the benevolent and patriotic desire to do a public good—to stimulate and reward industry and enterprise, however humble their condition—and strives, by concentrated and persevering efforts, to improve the condition of a district, of a county, or a state,—then will it inspire public confidence, obtain public support, and become a public blessing.

To show what has been the result of hearty co-operation, the following example is quoted:—

The Highland Society of Scotland affords another illustrious example of the utility of agricultural associations, when conducted with a view to public improvement. This society was organized in 1784, but so few were its members, and so limited its means, that it attracted but little public notice, nor effected any great improvement in husbandry, till the commencement of the nineteenth century. Yet it had sown the good seed which never fails, under proper management, to yield to the husbandman a bountiful harvest. Nor did it fail in this case. The society now numbers twenty two hundred members, embracing most of the opulent and influential men of the country, of all professions, and distributes annually, in prizes, about seventeen thousand dollars. In no country or district has agriculture made more rapid strides in improvement, than it has in Scotland, since the organization of this society; and although it may not have been the only, it most assuredly has been a principal cause, of this wonderful and salutary change. Up to 1792, the agriculture of Scotland, to adopt the language of the Edinburgh Quarterly Journal of Agriculture, was “wretched—execrably bad, in all its localities! Hardly any wheat was attempted to be grown; oats full of thistles was the standard crop, and this was repeated on the greater part of the arable land, while it would produce twice the seed thrown into it; turnips, as part of the rotation of crops, was unknown, few potatoes were raised, and no grass seeds or clover were sown. A great part of the summer was employed, in the now fertile shire of Fife, in pulling thistles out of the oats, and bringing them home for the horses, or

mowing the rushes, or other aquatic plants, that grew on the bogs, around the homestead." But a change soon came over the land. The seed which had been sown by the Highland Society had germinated, and its luxuriant foliage already covered the soil. In 1815, according to the authority I am quoting—"beautiful fields of wheat were to be seen,—drilled green crops every where abounded,—the bogs had disappeared,—the thistles no longer existed,"—naked fallows were abolished, draining was extensively introduced; wet lands were made dry: poor weeping clays were converted into turnip soils; and "whole parishes were completely transformed from unsightly marshes, into beautiful and rich wheat fields; and where the plough could scarcely be driven for slush and water, were heavy crops per acre, and heavy weight per bushel." The improvements in Scotch husbandry have continued to advance, until, according to the estimate of Sir John Sinclair, and Professor Lowe, both high authority,—the acreable products of her soil more than double those of our Atlantic States.

The same astonishing results may be attained by the agriculturists of our own country. With a soil unsurpassed, a climate more genial, and a population more industrious, what should prevent the same, and even greater, improvements in American husbandry? Nothing but the dissemination of correct information, and the fostering aid of our agricultural societies, is wanted to achieve what has never yet been done in the best farming districts of Europe, not even excepting the high tilled soil of Flanders. Our agriculture, like that of Scotland, is "wretched"—"execrably bad"—but we hope to see a change more rapid than that which attended the improvements in Scotch husbandry.

Judge Buel pays a neat compliment to the exertions of the Massachusetts and Pennsylvania Horticultural Societies:—

As evidence of the utility of horticultural societies in multiplying and improving the products of our gardens, and in promoting rural embellishments, I would refer to the neighborhoods of Boston and Philadelphia, where societies of this kind have long existed, and to the Horticultural Society of London. In the first named cities, and their environs, the progress of horticultural improvement has been manifestly great. Many new and choice fruits, culinary vegetables, and ornamental plants, have been introduced, culture has been much improved, the markets better supplied, and prices cheapened.

Horticultural improvement is checked, in a great degree, by the ignorance of men, who fancy that there is no need of consulting books to grow common vegetables. Cultivators of small gardens are even more prejudiced than farmers; they are content to grope on in ignorance, half tilling the soil, and reaping inferior products, when a few dollars expended for a useful work would save them ten times the amount, both in the quantity and quality of every thing they cultivate. Nothing is more common than the expression with persons possessing small gardens, when invited to subscribe for a periodical, or purchase a

work treating upon gardening, than this: "What use would such information be to me? Had I several acres of land, then I should esteem it my duty to read more." The smaller the garden, the greater is the want of information, in order to procure the most from the least space; and as long as cultivators neglect to improve their minds, their products will be meagre and inferior.

The great obstacles to horticultural improvement, are, ignorance of the relative merits of different kinds of fruits and culinary vegetables, and of the proper modes of cultivating and preparing them for the table. The generality of country gardens exhibit but a scanty assortment of vegetable productions, and these are but badly cultivated, and often of inferior quality. The tendency of horticultural exhibitions is, to show the good and bad in contrast, or rather to promulgate a knowledge of the better sorts, of their culture and use, to excite useful competition, and to demonstrate the utility of garden culture, as a source of health, pleasure, and profit. I have had many fruits presented to me, which the donors considered of the first quality, but which I found, on comparison, to be of secondary or inferior grade. The man who has seen or tasted only inferior fruits, may well mistake them for good ones. It is as easy to cultivate good fruits as bad ones; and no one eats so good fruits as he who cultivates them himself. It is as easy to cultivate the vergaleu as it is the choke pear; the green gage, as the horse plum; and yet the difference between them, in all the qualities which we most esteem, is incomparably great. But till we can show our neighbor better fruits, he will continue to cultivate, and rest content with his choke pear and horse plum.

The following remarks upon ornamental gardening, and the enjoyments to be derived from its practice, are worthy of the author's head and heart:—

With regard to what is termed ornamental gardening, or the cultivation of flowering shrubs and plants, there is an objection, real or affected, often made by very many people, on the ground that it yields no profit. If the great object of life was to accumulate money, without enjoying any of the comforts which it confers, save the gratification of animal appetite, the objection would be conclusive. But we are endowed with other and higher appetites than the mere brute; and Providence has every where surrounded us with suitable objects for their development, and innocent gratification. And shall we reject the proffered benefaction so kindly tendered for our benefit, because it adds nothing to our pelf? And what is there in the natural creation, better calculated to soften down the rough asperities of our nature, to awaken kind feelings towards each other, and excite reverence and love for the Most High, than a familiar acquaintance with the wonders and beauties of His vegetable kingdom? Did you ever know a misanthrope, or a miser, who was an admirer of flowers? I would not recommend the neglect of more important duties, for the culture of a flower garden: yet when there is ability or leisure, and these may be found to a greater or less extent in almost every family, a taste for floral beauties should be inculcated in the young, not only as a source of rational pleasure, but as a salutary precaution against bad companions and bad habits. The mind must be employed, and

must have recreation. It is better to direct it to the works of the Creator, than to the works of man. Lord Bacon has said of the garden, "it affords the purest of human pleasures—the greatest refreshment to the spirits of man—without which, buildings and palaces are but gross handiworks."

We alluded, while noticing the *Farmer's Companion*, to the prevailing desire, among farmers, to bring up their sons in some other employment, which they have imagined was more respectable, and a quicker road to wealth. The remarks of Judge Buel on this subject are too valuable to be passed over:—

The farmers, I have remarked, share in the errors of the day. Not content with the gains which are ever the reward of prudent industry, and which might be greatly increased by the culture of the mind,—nor content with one of the most independent conditions in society, hundreds and thousands of them seek other and new employments, and some of truly menial character, to get rid of labor, the greatest blessing to man, and to raise themselves in the imaginary scale of fashionable society. And if they cannot participate themselves in this imaginary greatness, and it is seldom any thing more than imaginary, they are anxious to inflict the evil upon their posterity,—to rear their sons to the law, the rail-road to office,—to political power and turmoil; to make them merchants, a useful, but greatly overstocked business, or to place them in some other genteel employment, which shall exempt them from the toils of labor, the salt that best preserves from moral corruption.

Mistaken men! What class in society have within their reach so many of the elements of human enjoyments—so many facilities for dispensing benefits to others—one of the first duties and richest pleasures of life—as the independent tillers of the soil? "The farmer," says Franklin, "has no need of popular favor; the success of his crops depends only on the blessing of God upon his honest industry." If discreetly conducted on the improved principles of husbandry, agriculture offers the certain means of acquiring wealth, and as rapidly as is consistent with the pure enjoyments of life, or with the good order and prosperous condition of society. Agriculture is the golden mean, secure alike from the temptations of mushroom opulence, and the craven sycophancy and dependence of poverty. "Give me neither poverty nor riches," was the prayer of the wise man of Scripture, "lest," he added, "lest I be full and dony thee, and say who is the Lord? or lest I be poor, and steal, and take the name of my God in vain."

We have not room to follow the author much farther in his excellent remarks. He recommends the establishment of professional schools of agriculture, and predicts that many of those who heard the Address will live to see "professional schools of agriculture established in our land, to see their utility extolled, and to be induced to consider them the best nurseries for republican virtues, and the surest guarantee for the perpetuity of our liberties. They should be established—they will be established—and the sooner they are established, the better for our country."

In conclusion, the author recommends to those "who have made up their minds, from necessity or from choice, to till the ground, the importance of studying the principles of their business, and with becoming acquainted with the most approved and modern practices in husbandry." The means of acquiring useful knowledge are abundant and cheap:—

One of these means, and a valuable one, is proffered him through the exhibitions and publications of these societies. Another is the perusal of books upon agriculture and rural economy, which should form a part of social and rural libraries. And another facility of acquiring this useful knowledge, is afforded by the agricultural periodicals of our country, which, besides containing much that is instructive in the philosophy of farming, are a record of the best modes of practice, and of much that is new and important, in the various departments of rural and household labor. A volume of the *Cultivator*, of which I can speak with accuracy, contains about as much matter as five or six volumes of the popular novels of the day, and twice as much as four numbers of our literary quarterly journals. The price of the *Cultivator* is one dollar per annum. I verily think, that if the farmer would divide his patronage between political and agricultural journals, he would be a manifest gainer, in his fortune and in his family—would be more happy in his business, and domestic in his habits—a better manager, and a more useful citizen.

We have given our testimony of the great value and importance, to the agricultural community, of the *Cultivator*, and we are happy to see that the author did not refrain, from any feeling of delicacy, to recommend it, though it was owing almost wholly to his untiring exertions that its reputation was so widely known, and the information which it contained so eagerly sought after. He did not underrate its usefulness, and we, in common with the whole community, regret that his life was not spared to carry out the good work which he had so zealously begun.

ART. II. *The Cultivator's Almanac, and Cabinet of Agricultural Knowledge, for the year 1840.* By WILLIAM BUCKMINSTER. 12mo. pp. 124. Boston, 1840.

ALMANACS are so numerous now-a-days, that it is almost impossible to make a choice. The old Farmer's Almanac has, however, been the most generally sought after by the farmers; among the cheap ones perhaps it is the best: but even allowing this, besides the mere astronomical calculations, the reading matter is mere trash, and scarcely worthy the farmer's notice.

It will be gratifying, therefore, to the farmer, and even to the gardener, to know that in the one named at the head of this notice, may be found a variety of useful and valuable information, relating to the tilling of the soil, and the labors of the farm and garden,—each month having its appropriate work assigned to it. The articles are mostly original; and as the author has, for many years, been a practical farmer, we can recommend this little work as well worthy the patronage of the agricultural community. The astronomical department will be found much more correct and complete than the common almanacs: and the calculations are suited to all parts of the United States. It is well printed, and will form a neat appendage to the farmer's library.

ART. III. *The New Genesee Farmer and Gardener's Journal.* In monthly numbers; double quarto form. 16 pages. 50 cts. per annum. Vol. I., No. 1. Rochester, N. Y., 1840.

THIS is the name of a new agricultural journal, recently established at Rochester, N. Y., where the *old Genesee Farmer*, which is now consolidated with the *Cultivator* at Albany, was published. It is to be edited by J. J. Thomas, and our correspondent, M. B. Bateham, of the Rochester seed store. We doubt not, from the industry and zeal of the editors, that it will prove a most valuable journal. The following extract from the prospectus will best explain the reasons of its publication and the objects of the editors:—

The *Genesee Farmer*, which for nine years past has been published in Rochester, to the great benefit of the whole western country, is now discontinued, and the labors of its publisher are transferred to the "*Cultivator*," at Albany. Regretting the loss of their favorite Journal, many of the warmest friends of Agriculture in this section, have advised the establishment of a "*New Genesee Farmer*" in this place, and have pledged their influence and talents to its support. The city of Rochester is the capital of the justly celebrated "*Genesee Country*;" it is surrounded by an intelligent agricultural community, and a vast territory of unrivalled richness and fertility, and is, in every respect, a most appropriate location for an *Agricultural Periodical*. The very extensive circulation of the late *Monthly Genesee Farmer*, affords good evidence that such a paper is demanded in this section, and that it will be sustained by the liberal and enlightened community for whose benefit it is intended. Influenced by these considerations, we have concluded to issue a "*New Genesee Farmer*," which we shall aim to make not only the cheapest but the most useful, and the

most extensively circulated agricultural paper in the country. With the advantages we possess, and the talented assistance engaged, we are confident this can be done, provided our friends, and the friends of improvement, come forward to our aid, with that praiseworthy and successful zeal which many have heretofore manifested.

Our farming friends, who are seeking for useful information, will do well to subscribe for the *New Genesee Farmer*. The volume commenced Jan. 1st.

ART. IV. *The American Farmer's Companion, or Cabinet of Agricultural Knowledge.* In monthly numbers, 8vo. 32 pages each. One dollar per annum. Vol. I., No. 1. Philadelphia. 1840.

THIS is a new work, devoted to agriculture, horticulture, and rural and domestic economy, published in Philadelphia. The editor states the object of the *Farmer's Companion* "is to combine, for present use and future reference, all important intelligence or information relating to agriculture and its kindred branches, both *original* and *selected*. The editor is assured that he will be liberally sustained by an able corps of *practical* correspondents; and he most respectfully invites his old friends to aid him, by contributing, from time to time, the results of their practical experience in the management of their respective farms."

An excellent work, containing a variety of information upon the practice of farming, written by able correspondents. It may be classed with the *Cultivator* and *New Genesee Farmer*, and, like those journals, should receive the support of all friends of agricultural improvement.

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

Origin of training trees against walls.—The origin of training the peach and vine against walls, is thus given by Rogers Schabol. A cultivator of Montreuil, having by chance thrown the stone of a peach against a wall with a south aspect, it grew up and produced fruit, which, from the shelter and heat of the wall, were found to be larger,

more succulent, and of better flavor, than those produced on standard trees. This cultivator, seeing that the heat of the wall was favorable to the peach, fastened the shoots to it with nails and ties, and found the fruit still larger and better. In what year this cultivator lived is not stated; but he is considered as much more likely to be the inventor than Girardot, to whom it is generally attributed. This Girardot lived in the time of Louis XIV, when training the peach had already been practised at Montreuil sufficiently long to produce young Pepin, who was the pupil of his father, already celebrated for training the peach.—(*Annales d'Horticulture*, translated in *Gard. Mag.*)

An Earthen Water-holder.—A writer in the *Gardener's Magazine*, gives a description of an earthen water-holder, for the purpose of watering many kinds of plants, particularly dahlias. It is a common plan with some gardeners, to sink a flower pot in the earth, near the base of the plant requiring much water, in order to facilitate its descent to the roots, and to prevent its being wholly absorbed by the surface. But common flower pots are rather unsightly objects, especially in borders where it is desirable to have every thing wear the aspect of neatness. To accomplish the main object, however, of applying the water directly to the roots, it is necessary that some other course should be pursued, than that of throwing away the water upon the surface. The writer, consequently, had an earthen water-holder made, somewhat in the shape of a broad mouthed decanter, at the bottom of which was pierced several small holes. This is sunk in the soil, at a short distance from the plant, as deep as the neck. Water is then poured in, (at any time of the day,) and it will gradually ooze, (the slower the better,) through the small perforations near the bottom; thus conveying the water to the very roots of the plant at once, without any external evaporation. By this method, a pint of water will go as far as three or four, which is an object where water is not convenient. But this is not the sole advantage, for the fibres are not drawn upwards, as is the case with surface watering, but follow the course of the moisture to the bottom of the holder, and then soon become established beyond the influence of external drought.—(*Gard. Mag.*)

Preservation of Kitchen Garden Vegetables through the winter.—The means generally used for preserving cabbages, and other similar plants, through the winter, are generally very unsatisfactory, and fail to accomplish the object desired. Our winters are so long, that plants are generally exhausted before the season is half over. It would be a great benefit to all cultivators, if some surer method could be found out, by which their excellence could be preserved for a greater length of time. The following system has been tried, and is stated to answer the purpose fully:—When the plants are growing over luxuriant in autumn, pull them up and expose their roots to the vicissitudes of the weather for a day or two; afterwards re-plant them in their former places, and if the weather is very mild, late in the season, the operation may be repeated for a second, and, perhaps, in some cases, even a third time. This practice stagnates the growth of the plant, hardens it, and invariably enables it better to withstand the severity of the following winter. Vegetables have survived severe winters in this manner, while those in adjoining gardens have nearly all perished. We would recommend the trial of this method. (*Brit. Farm. Mag.*)

Choice of Seed Wheat.—The following facts show that the seeds of the cereal grasses may be plump, solid, weighty, and abundantly farinaceous, and yet defective. A respectable and intelligent farmer,

seven miles south-west of Edinburgh, at an altitude of about seven hundred feet, soil and locality dry, informs us that his oats were well filled, but not cut, before the frost set in last autumn; were ultimately well cured, and produced a fair sample, weighing seventeen stones, and after paying mill dues, left fourteen and a half pecks of meal. Five weeks ago he put twenty-four grains, the growth of two different fields, into two separate pots, and placed them in a favorable situation for germinating. The result was, that one of the pots braided five out of twelve grains, the other seven, which is exactly one half of the grains sown. Previously to this trial, the gentleman intended sowing part of his farm with its own growth, which is his usual practice, but has now purchased all his seed oats from a more favorable climate. (*Scotsman*, April, 1839.) [A correspondent has furnished us with some good remarks on the choice of seeds, particularly of wheat, &c., which are deserving of attention; they will appear in our next number.—*Ed.*]

Tallies for general botanical purposes in the open garden.—For these purposes, none, in my opinion, both for appearance and durability, surpass moderately sized oak tallies, with a bevelled surface for the name, which, when well painted, will remain distinctly legible for four or five years, when they may be taken up, cleaned, repainted, and relettered, and they will then appear nearly as good as when they were new. The usual color of these tallies is white, lettered in black; but for naming pinetums, or single trees on lawns, a grass green, lettered in white, is far preferable. Tallies of this kind, made of three quarters inch oak, ten inches high, and three and a half inches wide, have been found to last upwards of twenty years. This is rather an expensive tally in the first instance, but, when a garden is once supplied with them, the annual outlay to keep up the stock is trifling. Making, painting, and lettering of this kind amount to about seven pence, (thirteen cents,) each tally.

The next most recommendable kind is of yellow deal, made of half inch wood, one foot in length, and two in width, rounded on the top, and painted at the bottom. Tallies of this kind are not so durable, on the whole, as oak; but, if they are kept upright in the ground, one lettering is found to remain legible as long as the wood lasts. In a damp situation (a border appropriated to sedges and ferns in the Oxford garden,) tallies which have been lettered nine or ten years, are now distinctly legible, though their lower ends are much decayed. The cost of this tally is about four pence (six cents) each. (*Gard. Mag.*, vol. xv., p. 453.)

The Character of Soils in relation to Vegetable Culture.—When a cultivator devotes himself to the investigation of a soil, it is a matter of indifference to him whether it is composed of alumina and silica, or whether these substances are in a state of quartz or feldspar, or that by their aggregation they form the debris of granite, or, finally, that they belong to primitive, transition, or alluvial formations: what he requires is, to know what kind of plants the soil will produce with the greatest advantage, the trouble it will require to put it in a state of culture, the manuring it will need, the quantity of this manure it will yield to the plant, and the portion it will retain in its own substance; these are its agricultural characters, those which adapt it to the objects of agronomy, and which shed light on his researches.

What we have already said of the composition and properties of soils demonstrates that certain of their scientific elements have a relation to the properties which are inquired after by cultivators.

Thus, as to the nature of the crops which may be expected from different soils, those which contain carbonates of lime and magnesia are eminently qualified to produce wheats and leguminous crops; the siliceous clay lands are the soils peculiarly adapted to forests; the siliceous are proper for plants which vegetate in winter, as rye, &c.; mould favors the vegetation of those potherbs which are cultivated for the stems, leaves, &c. As regards the facility or difficulty of working soils, those that are siliceous are easily dressed, as well as those which have an organic origin; whilst calcareous and clayey present great differences in this respect, according to the diversity of their composition. Finally, sandy and calcareous soils require frequent manuring, and this addition they decompose to the immediate profit of the plants; whilst clayey ones retain the manure, may have the process of manuring postponed to greater intervals, and receive at the same time a larger quantity of manure. Diluvian soils admit of improvement with gypsum, and siliceous clays with marl; whilst land rich in organic matters requires the dung of animals to facilitate and promote the decomposition of the mould. (*Jam. Jour.*, vol. xxvii., p. 89., for July, 1839.)

ART. II. Foreign Notices.

ENGLAND.

Magnificent Conservatory at Chatsworth, the seat of the Duke of Devonshire.—One of the most magnificent structures in England has been lately erected by the Duke of Devonshire, at his beautiful residence at Chatsworth. It consists of a large tropical conservatory. In general design, it may be compared to a cathedral, with central aisle and side aisles. The entrances will be at the ends, through porches, which will be treated as green-houses. When the whole is completed, it will cover an acre and a quarter of ground. There will be a carriage way through it, which will form part of a general drive through the pleasure grounds. It will be heated by six fires, all of which, and the means of access to them, the places for fuel, &c., will be under ground, and the chimneys carried in a tunnel, up the side of a hill, to the distance of nearly a furlong, so that there will not be the slightest appearance of artificial heating, or smoke, or sheds, &c., either within the house, or exterior to it. The conservatory is situated in an open part of a lofty wood, in nearly the centre of the pleasure-grounds, and is unquestionably the largest structure of the kind in existence, or on record. The whole is under the direction of Mr. Paxton, by whom it was designed. It was, probably, nearly or quite finished the past fall. (*Gard. Mag.*)

A weeping Larch.—A new variety of larch, with pendulous branches, has been lately brought into notice. It was discovered some time ago, in a seed bed, trailing along the ground: it was transplanted to an open space, in order to give free scope for the habit of the plant. For eight years, since it was first observed, it has retained its prostrate habit, and many gardeners and nurserymen, who saw it, pronounced it a valuable acquisition. The possessor of it commenced

grafting it extensively, on the common larch, and now has a number of trees, which he offers for sale at two guineas each. It must be a fine addition to the tribe of evergreen trees, and a desirable plant for small gardens. It is proposed that it should be termed the *Làrix communis pëndula Godsállii*, after the name of the grower, Mr. Godsall, nurseryman. (*Gard. Mag.*, vol. xv., p. 459.)

Great product of the Marie Louise pear.—Henry Crace, Esq., of St. John's Wood, states that he gathered from five small trees, in the autumn of 1838, two thousand two hundred fruit, and he supposed that three hundred had fallen off. He attributed the productiveness of the trees, and the fineness of the fruit, to the fact of the roots of the trees having been covered with dung, and duly watered from July to the end of the season.—(*Id.*)

FRANCE.

Semi-annual blooming of the Gladiolus natalénsis.—A writer in the August number of the *Annales d'Horticulture* of Paris, M. Boussière, states that he has succeeded in flowering the *Gladiolus natalénsis* in the following manner:—The bulb was planted in the autumn of 1838, and placed in a common green-house, where it passed the winter of 1838 and 1839. It there flowered, in the month of February, and the bulb was taken out of the earth in March. It was almost immediately planted in the open air, as M. Boussière was persuaded that the bulb required the whole of the summer to gain refreshment and nourishment for flowering in 1840; but the bulb commenced a vigorous and rapid growth, and, to his astonishment, came into bloom in the early part of August last. It produced two strong spikes of flowers.—(*Annales d'Horticulture de Paris*, vol. xxv., p. 91.)

[If the flowering of this species, the second time, was not a mere matter of chance, but may be repeated again, it will give it an additional claim to the amateur's care. In the open border, in August and September, no bulb can be more showy. If it will flower in February, in the green-house, it will be a most desirable ornament at that season.—*Ed.*]

Forcing the Chrysanthemum indicum.—On the 8th of May, and the 24th of July last, M. Cochet exhibited, at the meeting of the Paris Horticultural Society, specimens of the Chinese chrysanthemum, in full bloom. All attempts to force the chrysanthemum into bloom have heretofore failed, and it is by some extraordinary process that he is enabled to bloom them in the spring and summer. M. Cochet retains the secret of his method, but it is hoped that he will communicate it to the society, for publication.—(*Annales d'Horticulture de Paris*, vol. xxv., p. 90.)

ART. III. Domestic Notices.

Heating a Green-house with hot air and hot water combined.—Aided by your explanations of the various methods of heating green-houses with hot water, I have fitted my heating apparatus up in a sort of hermaphrodite style, (if I may use that expression.) My family room is on the west side of the house, and my kitchen to the north of the

green-house. I have cast-iron jambs and backs in the fire-places, in the room and kitchen, with air chambers around the jambs; the heated air passes from these chambers into the green-house at each end.

I have a boiler fixed in the back of my kitchen and above the air chamber; it is three feet long, two feet high, and nine inches wide; the pipes pass from the boiler, to the distance of twelve feet, where they are turned at a right angle, and run along lengthwise of the house eleven feet to the reservoir, which is a fifteen gallon iron bound cask, well painted. The upper pipe is fitted with an air pipe, of one inch diameter and six inches in height, placed nearly in the centre, to prevent the air from operating as a retarder to the motion of the water. The lower pipe is level, but the upper one enters the reservoir about one and a quarter inches higher than its entrance to the boiler: the operation is beautiful; a constant current can be perceived, running from the upper pipe into the reservoir, which must, consequently, pass out the lower pipe into the boiler, which is hermetically sealed. There does not appear to be a great pressure on the lower pipe, and so little on the upper one, that I stopped a small leak with *white lead*.

I am confident that a small green-house could be heated comfortably in this way without any extra fuel, except what will be required to build a small fire (in severe weather,) when the family retire for the night. I am of opinion that the moist heat from the pipes and reservoir, and the dry air from the jambs, make a very healthy atmosphere for the plants, (from their appearance,) the one counteracting the effects of the other: those that require a dry atmosphere can be placed at each end, near the aperture, where the hot air is admitted; and such as delight in a more humid situation, may occupy a place in the centre in the house, in the vicinity of the reservoir.

The upper and lower pipes are only three inches in diameter, with an air pipe in the centre, as before stated, an inch in diameter, fixed six inches from the angle in the upper pipe; it is six inches long, but it need not have been but two inches. [We do not think there is any necessity for it.—*Ed.*] The pipes are only nailed to the reservoir with threepenny nails, and so little is the pressure that they do not leak a particle. I have a cock in the reservoir, and I can draw off what water I wish, and fill up with fresh from the well. Should you think these few hints may be of any service to your readers, you may use them. I am much pleased with the system, and recommend it as an economical plan for a small house.—*H., Columbus, Ohio, Jan., 1840.*

Gardening in Zanesville, Ohio.—A correspondent writes us from this city, that he is erecting a small green-house, to be attached to his dwelling. It is to be about thirty feet long by sixteen wide. We are glad to notice such improvements in the West; and we shall expect our friends in that quarter to keep us informed of all improvements in gardening.—*Ed.*

Presentation of a Vase to M. P. Wilder, Esq.—Mr. Editor: It will, I have no doubt, be gratifying to your floral friends to learn, that, soon after the close of the splendid exhibition of dahlias, by Col. Wilder, Messrs. Hovey, Breck, Low and others, at the room of the Massachusetts Horticultural Society, in September, and at the Conservatory at the Botanic Garden in Boston, in October last, it was proposed, by a few admirers of this gorgeous flower, to present Col. M. P. Wilder with some token to testify the pleasure they have received (in common with thousands of their fellow-citizens for several years past,) by the brilliant displays which he has so repeatedly made. The subscriber,

Chairman of the Committee on Flowers of the Massachusetts Horticultural Society, was requested by the contributors to procure a silver vase, and to present the same, in their names, to Col. Wilder: this has been done.

The vase was manufactured by Messrs. Jones, Lows & Ball, in their best style, and bears the following inscription. The insertion of these few remarks in your valuable publication, with the letter of Mr. Walker, and the reply of Col. Wilder, will oblige many of your readers.—*Your's, S. Walker, Roxbury, Jan., 1840.*

Inscription on the vase.

"Consequitur quodcumque petit.

Presented to Col. M. P. Wilder, by a few friends, as a memento of his unrivalled specimens of the dahlia, exhibited at the Conservatory."

On the reverse side,

"Boston, October, 1839."

"To Marshall P. Wilder, Esq.

"My dear Sir: A few friends, admirers and cultivators of the dahlia, anxious to express to you, in some other way than words, how much they have been gratified by your splendid exhibition of the Dahlia, (and more particularly so by your specimens exhibited at the Conservatory, in October last,) have requested me, in their names, to prepare some token, as a memento of the high estimation in which they hold your successful cultivation. That memento is herewith sent you.

"No event, Sir, could have given me greater pleasure than being permitted by your friends to join with them in this humble tribute of respectful consideration and regards for your success and future personal welfare, and to subscribe myself, in their behalf,—*Your obedient, humble servant, S. Walker.—Roxbury, Dec. 7, 1839.*"

"To Samuel Walker, Esq.

"My dear Sir: Your very polite letter, accompanied with the beautiful silver vase, is received.

"I should do great injustice to my feelings, were I not forthwith to express to you, Sir, and to your associates, how fully sensible I am of the honor conferred on me by this distinguished testimonial of your approbation.

"If I have done any thing to advance the interests of horticulture, the reflection, in itself, would be ample reward for all my exertions; but that I should, in the opinion of gentlemen so well skilled in the science, have attained, in any degree, to such success, as to merit the motto you have caused to be inscribed on the vase, or the kind sentiments expressed in your letter, is more than I could have anticipated; and I must attribute this meed of praise rather to feelings of friendship, than to any deserving of my own.

"Be pleased, Sir, to receive for yourself, and to communicate to the gentlemen associated with you, my most heartfelt acknowledgments for this token of their esteem; and to assure them, that it will be carefully preserved as a treasure, during my life, and transmitted to my family as a memento of our mutual love for the productions of Flora.

"Wishing you all great success in the delightful pursuits of horticulture, and happiness and prosperity in all your concerns, I subscribe myself, with sentiments of great respect,—*Your obliged, but humble servant, Marshall P. Wilder, Hawthorn Grove, Dorchester, Jan. 1, 1840.*"

Cultivation of the Mûrus multicaulis, and production of Silk.—During the last season I raised about one hundred thousand mulberry

trees, part of which are for sale; I am now erecting a cocoonery, that will hold half a million of worms, and I have purchased eggs enough to feed one and a half million of worms in succession crops. I hope to hear of many persons embarking in this profitable business; if you could devote a small portion of your Magazine to the dissemination of information upon this great and vital subject, I think it would be useful and acceptable to your subscribers.—*R. Sinclair, Clairmont Nursery, near Baltimore, Jan., 1840.*

New Flemish Pears.—I observe that many of the new Flemish pears have fruited in the vicinity of Boston, particularly with Mr. Manning, of Salem. I have twenty-six or twenty-eight varieties in my *Catalogue*, which I received of Mr. Kenrick, nurseryman, in 1837. Descriptions of such of the new varieties as have produced fruit would be of much value, if you could procure such information.—*Id.*

Large Lemons.—We were shown, a few days since, two large and beautiful lemons, from the garden of Mrs. Bigelow, of Medford. The two weighed two pounds and a quarter, and the largest measured fourteen inches and a half in circumference one way, and fifteen and a half the other. The tree from which they were taken, is in a very flourishing state; it is planted out in the border of the greenhouse, and produces annually about two hundred fruits. There is a variety of lemons cultivated in collections, but none of them, unless they have been grafted from the above tree, produce such large and showy fruit. The tree is a most vigorous and robust grower.—*Ed.*

Chorizema Henchmānii.—A young but vigorous specimen of this beautiful plant will flower the present month in the collection of Mr. Towne. All the species are elegant objects, but the *C. Henchmānii* transcends them all, both in the brilliancy and profusion of its blossoms. The parent plant was imported a year since, but it was in so poor a condition that it did not long survive. Mr. Towne's plant is one of three which he propagated from it, two of which are now in his possession. The plants are yet small, and they will require another year's growth to enable them to show their true character.—*Ed.*

Pennsylvania Horticultural Society.—At the last meeting of this society, held about the middle of last month, there was a variety of plants exhibited, including some fine camellias. Mr. Sherwood exhibited his seedling, called *Sherwoodii*, described by Mr. Wilder, in a previous page of the present number. It is stated to be a first rate flower. Mackenzie & Buchanan exhibited *C. var. elegans*. Mr. Buist exhibited a new euphorbia, *E. Jacquiniflora* and *Syphocampalos bicolor*, too very fine plants, each of which have been noticed in our previous volumes.—*Ed.*

Camellia japonica var. Donckelaeri, is now beautifully in bloom in Mr. Wilder's collection. It is a remarkably showy and splendid variety.

Cereus Mallasoni, in the collection of Mr. F. Putnam, of Salem, is now nearly in bloom. Mr. Putnam received this species for the *C. splendens*: it is a beautiful plant, partaking, somewhat, of the character of *C. flagelliformis*, in its habit of growth, and of the *Epiphyllum speciosum* in the beauty of its flowers. It is a free and rapid grower.—*Ed.*

Horticulture in Georgia.—I am unable to give you any thing on the state of gardening in Georgia. I only know that in some parts, especially near Savannah, Augusta, Macon, and Columbus, there are expensive and tasteful gardens. Even in this up-country there are a

few charming residences, with well laid out grounds. I have no opportunity to visit them; I mean, however, at some convenient season, to send you some account of our botanic garden.—*Very respectfully, M. A. W., Athens, Ga., Dec. 1839.*

Ruellia formosa.—We had previously supposed that *Ruellia formosa*, was a tender and delicate stove plant, scarcely possible to grow in the green-house, except in a sickly condition; but having wintered it, thus far, in our sitting room, and it being just about to blossom, for a second time, within a few months, we would recommend it to whoever is fond of small but showy plants.—*Experimenter.*

Epiphyllum Ackermánii, appears to be a semi-annual blooming species. Plants in our own collection, and in that of Mr. F. Putnam, of Salem, have flowered twice the past year; once in the month of March, and again in the month of September; each time showing a profusion of blossoms. Every collection should possess one or more plants.—*Ed.*

Mr. Hancock's green-house, Burlington, N. J.—My green-house was not quite finished the past fall; the outside work is nearly all done, and the whole is closed up for the present. I hope, however, to get it finished before March. It is eighty-one feet long. In my old house I have several camellias in flower, including *Parksii* and *incarnata*.—*T. Hancock, Burlington, N. J., Jan. 14, 1840.*

ART. IV. Retrospective Criticism.

Correction.—In our last number, in our article giving a retrospective view of the progress of gardening for 1839, we unintentionally committed an error, which we hasten to correct. Under the head of the Statistics of Horticulture, and while noticing the state of *commercial* gardens, pp. 13 and 14, we spoke of the improvements made upon the beautiful demesne of Dr. Edmonson, of Baltimore: this should have been under the head of *private* gardens, as Dr. Edmonson is one of the most zealous amateurs in the city, and in no way connected with the trade.

Clairmont Nursery, near Baltimore, (Vol. VI., p. 6.)—I herewith send you my *Catalogue* of fruit and ornamental trees and shrubs, in order to make us better acquainted, for I think you are entirely unacquainted with me and my establishment, if I may judge from the manner in which you mention it, in the first number of the current volume of your *Magazine*, when compared with the friendly and general notice taken of many others, and even some very small concerns. As I live a little out of the city, I will take some pains to state a few facts, which will enable you to form a more correct opinion of my nursery, until you have an opportunity to inspect it.

In establishing this nursery, I have endeavored to confine my attention more immediately to the hardy and most useful fruits, ornamental trees and shrubs; although I have a small green-house, and also a hot-house tolerably well stocked with plants, I am more anxious to have a few varieties of the very best articles well cultivated, than to swell out a large catalogue, which would increase my own attention without benefiting the public. I have one hundred and seventy-eight

acres of land, of the first quality, possessing all the desirable kinds of soil, such as peat and brown, sandy and clayey loam, all well fenced, and built on. About forty acres are well stocked with nursery articles, collected from good sources, and hundreds of my standard trees bearing fruit, annually, from which I can take my grafts and buds with certainty. My grounds are one mile from the city line. I hope you will make it in your way to call on me, and look at my establishment, when you visit the city again.—*R. Sinclair, Clairmont Nursery, near Baltimore, January, 1840.*

[With the above, we received the *Catalogue* of trees &c., offered for sale by our correspondent. We had seen it before, and were somewhat aware of the extent of the nursery, and it was our intention to have visited it when in Baltimore last fall; but we were obliged, from unavoidable causes, to deprive ourselves of that pleasure until another time. We give place to the remarks of our correspondent with much pleasure, as we are always ready to be corrected, if we unintentionally make any misrepresentation. We have repeatedly requested nurserymen to give us an account of the extent of their establishments, that we might, when alluding to them, do so without committing any error.—*Ed.*]

The American Hazelnut.—A correspondent in your Volume III. (for 1837,) page 313, says, that he has raised a species of hazelnut, so apparently identical with the European filbert, as to have been pronounced the same by Mr. Nuttall, and considered strikingly similar by a committee of the Massachusetts Horticultural Society, to whom some of the fruit was referred. The plant was found on the borders of the Kennebec, Me. May we ask, what has been the subsequent fate of this shrub, and whether its superiority will not entitle it to culture, and if it be in a condition for distribution by sale or otherwise? We apprehend that it may prove to be *Corylus rostrata*, a species, though not rare, in the vicinity of Boston, yet by no means so common as the common hazel.—*L.* [We hope this notice will put our correspondent, J. B., in mind of his promise to send us a "pound or two" of the nuts, in order that we may better judge of their value.—*Ed.*]

Notice and Quere.—In a botanical excursion to the Oregon Mountains in South America, communicated to Sir W. J. Hooker, Mr. Gordon says, [at the altitude of] "about four thousand five hundred feet, the first plant which attracted my attention was what I imagined to be a fine individual of *Cereus truncatus*, in full flower, hanging from the under side of a large tree that was bent over the stream. To my surprise and delight I found it to be a new species. In habit it is quite like *C. truncatus*, but when the flowers are examined, it proves abundantly distinct in its four winged ovary, its straight and regular, not oblique and irregular, flower, the deeper and more delicate hue of the inflorescence, and the pink, not white, color of its filaments. I have named it *Cereus Russellianus*, in honor of his Grace the Duke of Bedford." Has there been any notice of this fine plant in the British collections, or has it ever reached, or is it likely soon to reach, our shores, as an additional ornament to our green-houses?—*Observer.* [This new species has flowered in the splendid collection of the late Duke of Bedford, and we shall notice it in our next number.—*Ed.*]

Horticulture in Buffalo, N. Y., (Vol. V., p. 161.)—In consequence of the account given in your Magazine, many amateurs and gardeners have visited Buffalo, and were very much disappointed, as the state of things did not at all answer to the account given.

As it respects the native forest trees, their aspect was any thing but cheering, as the greatest part of them were leafless the last week in July. In reference to the green-houses, they are certainly very good, and show that the proprietor will spare no expense in the buildings. But those plants, which could not be described for the want of time and space, have not been observed by any one who has taken the trouble to go there for the purpose of seeing them. There was in the green-houses a very handsome *Ficus elástica*, and, in the second place, a few yellow, sickly looking camellias: these were the most rare and interesting plants that could be observed. In the garden there was a frame lately planted with pine-apple plants, in clear sand, but they were nearly all dead.—*An Observer and Subscriber, Rochester, N. Y., Nov., 1839.*

ART. V. *Massachusetts Horticultural Society.*

Saturday, Nov. 30th, 1839.—Exhibited. Fruits:—By the President of the Society, from a gentleman of his acquaintance, St. Germain, Easter Beurré, Turkish (?) Bon Chrétien, and a variety unknown.

Vegetables:—From J. L. L. F. Warren, a basket of fine tomatoes, taken from vines from which a bushel had been cut the same week.

Dec. 7th.—Exhibited. Fruit:—From T. Lee, Esq., two kinds of pears without name, of very handsome appearance. From M. P. Sawyer, St. Germain, Passe Colmar, and Sylvanche Vert pears, the two former beautiful specimens; also, Bellflower, sweeting from New York, and another variety of apple from Newbury, Mass., name unknown. From Nathaniel Dorr, Boston, specimens of the Wild Fig, so called, brought by him from Michigan, and said there to be a pleasant fruit; seeds of the same were distributed among the members for trial. We were not present at the meeting, and did not see the wild figs alluded to: if any of our friends were present, they will gratify us by giving us some account of the Michigan wild fig, as it is a fruit we have never heard of.

Jan. 11th, 1840.—Exhibited. Fruits:—From R. Manning, Bellflower apples, (Coxe No. 33,) and Beurré Sutin and Winter Orange, (Coxe No. 37) pears. The scions of the Beurré Sutin, were received from Dr. Van Mons, and produced fruit for the first time this season; it promises to be a great bearer, and a high flavored and excellent variety. We have noticed this in another page as the Beurré Sentin, having misunderstood Mr. Manning in the pronunciation of the name. From J. L. L. F. Warren, specimens of Roxbury russet, Nonsuch, Rhode Island greening, and a variety, supposed to be a seedling: its quality fair, but not to be classed above second rate. From D. Saunders, Rowley, a basket of Minister apples, a handsome and showy kind, from the original tree on his farm, in that town. The fruit had been kept too long for eating, but they have the reputation of being a first rate variety. From James Leonard, Taunton, specimens of the Burgemeester pear, (the variety so called about Boston.) It is not, however, the *true* Burgemeester, described by Thompson, in the

London Horticultural Society's *Catalogue*, and by other pomological writers. Mr. Manning thinks it will prove to be synonymous with the *Monsieur le Curé*, of French authors, and the *Saint Lézin*, of the above *Catalogue*. It is a great bearer, and a profitable fruit to grow for the market.

Saturday, 25th.—At this meeting, the standing committee on flowers, held a meeting, called by order of the chairman, to decide upon the award of premiums for 1839. C. M. Hovey was appointed secretary, and the following report was then drawn up, and accepted by the committee.

The standing committee on flowers, having attended to the duty of awarding the premiums, offered by the society for the year 1839, report as follows:—

Geraniums—For the best twelve varieties of geraniums, to Wm. Meller, a premium of \$10 00

For the second best twelve varieties of geraniums, to Hovey & Co., a premium of 5 00

Tulips—For the best twelve varieties of tulips, to S. Walker, a premium of 10 00

For the second best twelve varieties of tulips, to S. Walker, a premium of 5 00

Pansies—For the best display, to S. Walker, a premium of 5 00

For the second best display, to S. Walker, a premium of 2 00

For the best seedling, to S. Walker, a premium of 3 00

Roses—For the best display to A. Aspinwall, a premium of 10 00

For the best 24 varieties, to S. R. Johnson, a premium of 5 00

For the best 12 varieties, to R. Howe, a premium of 3 00

For the best 12 Chinese and other tender varieties, to S. R. Johnson, a premium of 5 00

Pinks—For the best display, to S. Walker, a premium of 5 00

For the best six varieties, to S. Walker, a premium of 3 00

For the best seedling, to Wm. Meller, a premium of 3 00

Carnations—For the best display to T. Mason, a premium of 5 00

For the best six varieties, to Wm. Meller, a premium of 3 00

For the best seedling, to Wm. Meller, a premium of 3 00

Dahlias—For the best display, to M. P. Wilder, a premium of 10 00

For the second best display, to J. J. Low, a premium of 8 00

For the third best display, to J. Bréck & Co., a prem. of 7 00

For the fourth best display, to Hovey & Co. a prem. of 6 00

For the fifth best display, to S. Walker, a premium of 5 00

For the sixth best display, to T. Mason, a premium of 4 00

No hyacinths were offered for premium. The seedling geranium was not thought worthy of a prize by the judges.

The committee also awarded the following premiums offered by the liberality of T. Lee, Esq., for the encouragement of the growth of native plants:—

For the best display of native wild flowers, to Wm. Oakes, Esq., of Ipswich, a premium of 5 00

For the second best display of native wild flowers, to E. Weston, Jr. Esq., a premium of 5 00

No competitor was thought deserving of the third prize, and the committee reserved the remaining sum of five dollars, appropriated by Mr. Lee for 1839, to be added to next year's prizes. We would not omit to mention, at the present time, that the flowers must be cultivated, next year, to be eligible for the prizes.

A sub-committee of three gentlemen was chosen to draft rules and regulations for the exhibitions, during the season. We are

happy in announcing this vote. The society have too long been without any system, and we hope something will now be done which will enable the society to accomplish greater results.

ART. VI. Faneuil Hall Market.

		From	To			From	To
<i>Roots, Tubers, &c.</i>		\$ cts.	\$ cts.	<i>Squashes and Pumpkins.</i>		\$ cts.	\$ cts.
Potatoes:				Squashes, per cwt:			
Chenangoes, } per barrel,	1 25	1 50		Winter crook neck,	2 50	3 00	
Common, } per bushel, . .	50	—		Autumnal Marrow,	3 00	4 00	
Common, } per barrel, . .	1 00	1 25		Canada crook neck,	3 00	3 50	
Common, } per bushel, . .	50	—		Pumpkins, each,	20	25	
Eastports, } per barrel, . .	2 25	2 50					
Eastports, } per bushel, . .	1 00	—					
Sweet Potatoes, per bush.	2 00	2 50					
Turnips:				Fruits.			
Common, per bushel,	25	37½		Apples, dessert, new :			
Ruta Baga, per bushel, . . .	37½	50		Common, } per barrel, . .	2 50	3 00	
Onions:				Common, } per bushel, . .	1 00	—	
White, per bushel,	1 00	1 50		Rumsets, } per barrel, . . .	3 25	3 50	
Red, per bunch,	3	4		Rumsets, } per bushel, . . .	1 50	—	
White, per bunch,	2	3		Baldwins, } per barrel, . . .	3 50	4 00	
Yellow, per bushel,	62	75		Baldwins, } per bushel, . . .	1 50	—	
Beets, per bushel,	50	62½		N. Y. pippins, } pr barrel, .	3 00	3 50	
Carrots, per bushel,	50	62½		N. Y. pippins, } pr bushel, .	1 50	—	
Parsnips, per bushel,	62½	75		Greenings, per barrel, . . .	3 00	3 50	
Horseradish, per pound, . . .	10	12		Pearmaines, per barrel, . . .	3 00	3 50	
Radishes, per bunch,	12	20		Sweet, per barrel,	3 00	3 50	
Shallots, per pound,	20	—		Lady Apples, per bushel, . .	2 00	—	
Garlic, per pound,	12	—		Dried apples, per pound, . .	7½	8½	
Cabbages, Salads, &c.				Pears:			
Cabbages, per dozen:				St. Germain, per doz.	50	1 00	
Savoy,	37	50		Winter St. Michael, pr doz. .	—	—	
Drumhead,	75	1 00		Chaumontel, per half peck, .	—	—	
Red Dutch,	50	75		Baking, per bushel,	2 00	2 50	
Cauliflowers, each,	12½	25		Grapes, per pound:			
Brocoli, each,	20	25		Black Hamburg,	—	—	
Lettuce, per head,	6	10		Malaga,	17	20	
Tomatoes, per dozen,	50	75		Cranberries, per bushel, . . .	2 50	3 00	
Celery, per root:				Lemons, per dozen,	20	25	
Common,	6	8		Oranges, per dozen :			
Bailey's Giant,	10	12		Sicily,	25	—	
Spinach, per half peck,	25	—		Havana, (sweet),	37½	50	
Pot and Sweet Herbs.				Pineapples, each,	25	37½	
Parsley, per half peck,	50	—		Coconuts, each,	5	6	
Sage, per pound,	17	20		Chestnuts, per bushel,	4 00	4 50	
Marjorum, per bunch,	6	12		Walnuts, per bushel,	1 75	2 00	
Savory, per bunch,	6	12		Almonds, (sweet,) per pound, .	—	—	
Spearmint, per bunch,	3	6		Filberts, per pound,	4	—	
				Castana,	4	—	
				English walnuts, per lb.	5½	6	

REMARKS.—We have but little alteration to note this month. The weather has been steadily cold, which has prevented supplies of some articles from coming to hand, and the stock being reduced, holders are

more firm in their prices; and although there have been but a few very slight advances, sales have been more quickly effected full up to our quotations.

Potatoes being such a staple commodity, a scanty supply or an over stock immediately causes an advance or a decline in prices. Owing to the severe weather of the present month, and navigation from eastern ports having remained closed since our last, there have been no arrivals for some time: the stock laid away for spring sales has been drawn heavily upon, and, unless a supply comes to hand in the course of a week or two, an advance in prices will be the result. Onions continue plentiful. Of beets, carrots, &c., the usual stock, sufficient for all demand. Radishes, with the advance of the season, have improved much in appearance, and, from a more brisk demand, command fair prices.

Cabbages continue about the same; Savoy's exceedingly abundant, and of prime quality; drumheads are not so plentiful. Cauliflowers are nearly all gone, only a few remaining on hand. Very little brocoli brought in. Lettuce comes to hand more freely, and improved in quality. Forced tomatoes continue to sell well at our prices: they have been supplied the whole winter through, and, being a favorite article, have been much sought after; it is a new article of forcing, but will undoubtedly pay well, from its abundant product. Celery is tolerably abundant; there would, however, have been a much greater supply, had the roots kept well; but, from some cause, they seem to have wintered poorly, and many roots have been totally destroyed by decay at the heart. Spinach plentiful. The stock of squashes is now reduced rather low, common crooknecks being nearly all the kind on hand; autumnal marrows are about gone; what remain command our quotations; no West Indies have yet arrived, but a stock is expected.

Apples have advanced a shade since our last, and there is a greater and more brisk demand: dried apples sell well. No table pears remain now, but the St. Germain. Grapes continue a drug. Of cranberries, a short supply: the great demand for shipping has reduced the stock very low; this is the case, however, almost every season, so much are they sought after at the south; a few years since, the prices rarely rose higher than one dollar, or one dollar and fifty cents per bushel, at any time through the season. Lemons were never more plentiful. Sicily oranges are rather poor; Havanas are excellent. Some few Pine-apples are to be had, but of inferior quality. Walnuts are abundant, and dull sale at quotations.—*M. T., Boston, Jan. 28, 1840.*

HORTICULTURAL MEMORANDA

FOR FEBRUARY.

FRUIT DEPARTMENT.

The same remarks which we made last month, under this head, may be applied to February also. The cold is generally so intense, that nothing can be done in the open garden, and it is not much of an object to attempt the forwarding of grape vines in the green-house, or fruit trees in pots, except where there are ample means to do so; not much can be

effected in a single green-house, but where there are pits, frames, green-houses, and hot-houses, so as to command any temperature, much may be accomplished. Few amateurs possess all these means, and as our remarks are intended more for them, than the professional man, who may have charge of a large private establishment, where forcing is carried on the winter through, we shall have but little advice to give now in this department.

Grape vines, in green-houses, may be put in preparation for growing, towards the close of the month. The plants will be damaged if any attempts are made to forward them sooner; it is better to assist nature than to force her. In graperies, the vines may be started at any time, as there are no plants which may suffer.

FLOWER DEPARTMENT.

Camellias will now be showing their flowers abundantly, and the plants should be properly watered. The scaly insect is the only troublesome pest to the camellia, but they are easily got rid of. If the plants are infested with them, give them a good washing with a sponge, and go over each leaf separately, and also the branches, and clean them all off; it is not much labor, and the plants will be benefitted by the operation. This should have been done before they flowered, if they needed it; but rather than the plants should suffer, it would not be prudent to put it off. If it is desirable to raise seedlings, the opportunity should not be neglected of impregnating all those flowers which show a stigma; in general, these will be confined to the single and semi-double sorts, yet occasionally some of the fine double varieties may be found, which may be seeded if the operation is carefully performed.

Dahlias may now be brought forward, by potting them at once in small pots, and placing them in the warmest part of the house.

Verbenas will now commence to grow; repot all those which need it, and train the branches to neat trellises.

Oxalis Bowiei will now have done flowering; gradually lessen the quantity of water, and place the pots as near the glass as possible. *O. versicolor*, *cérnua*, and *rosea*, will be each displaying their blooms, and should be watered liberally.

Cactuses will now be showing their buds: those plants wanted for early flowering, should be placed in a warm situation, and be watered two or three times a week.

Tree pæonies, coming into bloom, should be well watered.

Trevisana Coccinea. This pretty little plant should not be forgotten. Repot the small offsets, or corms, as they are called, the latter part of the month, one each in No. 1 pots.

Hyacinths in pots, now coming into bloom, should be well watered.

Geraniums should be looked after: repot now, if the plants need it.

Erica seeds may be now sown, and cuttings put in with more success than at any other season.

Roses, *carnations*, and other plants in frames, should be looked at, and if any fine weather should occur, open the sashes and let in the sun and air.

VEGETABLE DEPARTMENT.

Cucumber seeds sown last month, as directed, will now have made plants sufficiently large for hilling out. Let the beds be prepared, and the operation finished the first fair weather.

Radishes, *Lettuce*, &c., may be sown again for a successive crop.

Tomato, *Egg plant*, and *Celery seeds*, should be sown this month for an early crop.

THE MAGAZINE OF HORTICULTURE.

MARCH, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Some hints upon the growth and selection of superior varieties of seeds.* By Dr. G. WATSON, Philadelphia.

It appears to me that there are few subjects, connected with the farm or the garden, which seem to be of more consequence, and yet the least understood, than the proper growth and selection of seeds for planting, particularly of any and every kind of grain. A few remarks in relation thereto, though not strictly confined to the garden, I have thought might not be out of the way in your pages.

The farmer ought to be aware, when he is desirous of obtaining superior kinds of grains for seed, such as wheat, oats, barley, &c., that he should select only that which is of the best quality, from any neighboring farm; if imported, so much the better; and above all things, to be careful that it is sown in a well prepared field, as far apart as possible from any inferior variety; as the pollen, or male part of the plant, of the poorer sort, is so apt to mix with the good, if each should be in flower at the same period. The result would be a very inferior kind, perhaps worse than either of the parents. The least breath of wind is capable of sending the pollen to a great distance, and the stigma, or female part, has a great attraction for it. There are many that ridicule and laugh at this idea; but let those who disbelieve, take a small quantity of imported wheat, for

instance; let it be sown contiguous to a piece upon which a kind is planted, which has been grown on the same soil for years; let the result be particularly noticed, and the consequence will be, that a hybrid of a very inferior quality, will generally be produced.

There is another thing that should be considered, and that seriously: the farmer should never sow his own wheat above two years, at most: a change of the seed is beneficial, although it may be only procured from the farm of the nearest neighbor; more especially if the soil is materially different from that in which it had been grown; as grain taken from one soil, and planted in that of a different kind, will produce better, and there will be much less chance of deterioration. By this practice, the farmer will find the quantity increased, and the quality much improved. Let any cultivator continue to sow one kind of grain for a series of years, and it will run out, as the term is; that is, it will be almost entirely useless. Many farmers complain that certain kinds of wheat will not produce now as they did formerly; the reason is obvious, from what has been stated above.

All grain, selected for seed, should have all the characters of good quality, viz., it should be thoroughly ripe, and well cured; the least damp destroying the fecula or starch, which will cause it to braird sickly; [some excellent remarks will be found, on this same subject, in our last number, (p. 67,) to which we would refer: they confirm the observations of our correspondent.—*Ed.*] and I am fully convinced, that a great part of the grain, so sickly in appearance when growing, that is generally sown, is often attributed to worms and insects, of different kinds, when it is nothing more or less than very inferior seed; the experiment, which is the best test, need only be made, and every cultivator will soon be convinced as to its reality. All the farinaceous grains cultivated on our farms or gardens, with the exception of Indian corn, are exotic, and the seed should be frequently renewed, by importing the very best varieties to be found in Europe. Many farmers complain that barley, oats, &c., loose much of their weight after a few years cultivation; but this ought to be expected, as they are more suited to a northern latitude than any part of our country.

In raising root seeds, even greater care should be taken, if possible. The whole of the *brassica* family are very apt to hybridize, even when planted at a great distance from one another. In raising the Swedish turnip, one of the most valuable roots, for seed, the best turnips should be selected; they should be of a regular, oval, shape, tapering towards the root,

and having but one small shoot where the leaves arise; plant them in some corner, or part of a field, far from any cabbages, radishes, or any other kind of turnips that may have been set out for producing seed, and would be likely to bloom at the same time: without this precaution, there would be hybrids, partaking but little of the character of either plant; and even then, when the greatest care has been taken, the bee, which delights to feed on this family of plants, when in flower, will carry the pollen on its legs, and part of the seed so impregnated, will be very inferior. Let cabbages be planted in the same manner. Indeed, the whole family should be treated alike, for by neglecting the above rule, the grower, ignorant of the causes, cannot produce such excellent articles as formerly, from the same seed. Potatoes ought never to be planted above two years on the same farm. If a change of seed is made yearly, so much the better: always select the best potatoes for planting, and not the worst, as is too generally done by many individuals; these will produce strong and vigorous roots: it is rare to see a small vine have good potatoes; the reverse is generally the case.

There seems to be an apathy or carelessness among the greater part of our farmers; they do not seem to think of the necessity of making improvements, and studying the nature and history of the grains which they cultivate, and upon which our existence so much depends. In conducting experiments upon any kinds of grain, the zealous farmer should set apart a certain portion of the farm, say an acre or two, and that should be put under high cultivation for growing and proving seeds, and allowing all kinds of grain a fair chance for trial. Let the seeds be accurately measured, and the quantity of land occupied, that the cultivator may be enabled to give a correct report, as to the produce, the quality and quantity, weight, &c. If wheat, let a certain quantity be made into flour, in order to ascertain whether it is a superior sort to that which had been previously cultivated, and used in the family. Societies should be formed in every county, that they may communicate any intelligence relative to agriculture, and the experiments made, and their results. By so doing, a degree of information would be disseminated, which would be of essential benefit to the farmer, besides the great advantages gained in a pecuniary point of view.

From whence have all the superior new kinds of wheat, barley, oats, corn and other grain, turnips and other roots, been obtained, but from the careful observation of farmers, who, while investigating minutely their fields, have accidentally noticed some plants which were different from all the rest, at-

tracted, probably, by their more vigorous growth, the plumper seed, or the better formed root. These have been planted far apart from the others, the future produce carefully watched, and found to be of a superior quality. The best are again planted, and selections again made, repeating the practice from year to year, and by this means varieties of far greater excellence have been secured. The zealous cultivator, who pursues this course, is generally well remunerated for his trouble, besides the reflection that he has accomplished a great good for the community at large. Such is the history of many of the best varieties of grain now in Europe, especially in Britain, where so much attention has been paid to agriculture. The same results may be accomplished, by our own farmers, if they would but pay a little more attention to the cultivation of their farms. With such a soil and climate as we possess, a thousand fold might be produced; and it is to be hoped that the time will soon come, when the increased attention given to agriculture will induce those, who estimate its importance, upon the social and moral condition of the country, to make the same attempts to improve the quality of the articles which occupy their care and attention.

G. WATSON.

Philadelphia, Jan. 23, 1840.

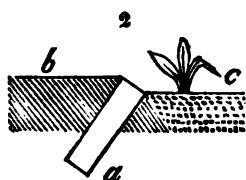
ART. II. *Some remarks on the formation of the margins of flower beds on grass plots or lawns.* By the EDITOR.

IN our last volume, (p. 131,) we offered a few observations upon the method of growing plants in beds upon small grass plots, or on the edges of lawns. Very few attempts to introduce this method, have ever been made in this country, even on the smallest scale; and it was with a view to induce amateurs, and proprietors of small villa residences, to accomplish something of the kind, that we offered the remarks which we have referred to. We are glad to learn that our observations have been the means of drawing attention to the subject, and that they have, in some instances, induced amateurs to adopt the style of planting small grass plots, and forming upon them circular, or other shaped beds, for flowers. In front gardens to small suburban villas, nothing can be prettier than this plan of occupying the ground, and the method is, generally, to be

much preferred to the old, and almost universally followed system, of forming gravelled walks, with board, grass, or box edgings, and dug borders. This is particularly so, when the object is to have a neat garden, and kept in order at the least expense.

After what we have said in recommendation of planting in this manner, in the article alluded to, we shall not repeat the same here: our object is now to offer some additional remarks upon the best method of forming the margins to flower beds on turf. One great objection urged against the formation of ordinary beds on grass, made by merely digging away a portion of the turf, of any particular form, has been, that the edges of the grass were apt to run into the soil, and soon fill up the bed, unless they were repeatedly cut with a spade or knife; and the latter operation has been deemed one of much trouble and labor, as well as rendering the turf unsightly for some days, from its newly cut appearance. To obviate this, and prevent it from being any obstacle in the way of planting in this manner, we copy the following plan, which is recommended in Loudon's *Suburban Gardener*, as one of the simplest modes. We think it a most excellent one for all purposes, whether for broad walks, bordered with a deep turf edging, or for dug beds of almost any shape, unless very irregular in their outline. When once the beds are formed, no more care will be necessary about keeping the edges in order, other than cutting the grass, the whole season. The beds cannot be encroached upon by the turf, and there will be no occasion for the shaven edges, which repeated cutting exposes to view. The whole will have a finished and cultivated expression, with scarcely the least attention from the possessor of the garden.

The annexed plans, (figs. 2 and 3,) represent this method. Common bricks are all that are necessary to form the outline.



These should be placed together upon their broadsides, at an angle of 45° , as shown in the section, (fig. 2,) in which *a* is the bricks; *b* the surface of the grass; and *c* the surface of the dug bed, under the level of the grass.

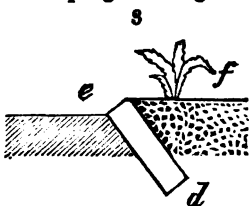
In all cases where dug beds are introduced on grass, the surface should either be above or below the turf, in order, as Mr. Loudon remarks, "to exercise the expression of art, and to take away from the common-place idea of merely digging down a portion of the turf, of a particular shape, and planting it with flowers." The

correctness of this principle will be apparent to all who have any idea of what constitutes modern landscape gardening.

Contrary to the above, the other plan, (fig. 3,) shows a section in which *d* is the brick; *e* the turf; and *f* the dug bed. The plan is here reversed: the turf is below the surface of the dug bed. In the former of these plans, plants which require considerable moisture may be cultivated,

as they may be easily supplied with plenty of water, by entirely flooding the surface, if necessary; such, for instance, as pansies, primroses, some kinds of herbaceous ranunculuses, minuluses, &c. In the latter, those which prefer a dryer situation will flourish best, as the mignonette, verbenas, petunias, calandrinias, &c.

This method is simple in construction, and cheap in execution, and appears to us to be well adapted to the purpose. We would recommend it for adoption, well assured that it will be the means of saving much annual labor and expense, especially in small gardens, where the proprietor is his own gardener.



ART. III. *Pomological Notices; or Notices respecting new and superior varieties of Fruits, worthy of general cultivation. Additional Remarks on new Pears; with Notices of several kinds which have not been previously described.* By R. MANNING, Pomological Garden, Salem, Mass. *Notices of several new Plums.* By the EDITOR.

THE variations which occur in many of our cultivated fruits, owing to the difference of the seasons to which we are subject, has induced me to offer you some additional remarks on those pears which have already been described, as well as a few others, which are comparatively but little known. As the descriptions may be found, in detail, in the London Horticultural Society's *Catalogue*, in Lindley, and in Kenrick's *American Orchardist*, I shall do but little more than name those varieties which continue to deserve extensive cultivation.

Duchess d' Angouleme.—Very large, fine, and productive, even on standard trees; grows well on the quince.

Andrews.—Large and good, and bears abundantly; some persons think it equal to the Bartlett.

Beurré Bosc.—Excellent. Mr. Thompson observes, in Loudon's *Gardener's Magazine*, for 1837, that "the Bosc and Louise Bonne of Jersey, more than rival the Marie Louise." Grows well on the quince.

Bartlett, (Williams's Bon Chrétien,) continues to be the finest and most productive pear of its season, which is in August and September.

Belle Lucrative continues to be first rate.

Capsheaf.—This is, most probably, a native fruit. I can trace it to Rhode Island, where it may have originated:—a good fruit and great bearer.

Beurré Diel.—This pear we have found, for the last two seasons, to crack and blight on standard trees. The large and beautiful specimens which have been exhibited at the Hall of the Massachusetts Horticultural Society were grown on trained trees, grafted on the quince.

Dearborn's Seedling.—This pear is small, handsome, a great bearer, and excellent.

Easter Beurré.—This pear is not uniformly excellent, when grown on standard trees; it succeeds well grafted on the quince, and trained. We have raised fine fruit on trees worked on the English white thorn.

Frankreal d'Elé.—This pear, so excellent, and so productive, we have never known to fail in the most inclement seasons; it does well either on the pear or quince stock.

Fulton.—This native pear, we think, will become a general favorite; it continues to produce abundantly, and ripens its fruit every year.

Henry IV.—This pear is of small size, not handsome, but a great bearer, and extremely high flavored.

Hooper's Bilboa, (Golden Beurré of Bilboa.)—Large, handsome, productive, and good; succeeds on the quince.

Jalousie.—Medium size, yellow russet color, very agreeable flavor; bears well every year; good either for the market, or for private gardens.

Julienne, continues to bear well; fruit fair and good.

Johonnot.—Not handsome, nor a great bearer, but very fine and high flavored.

Long Green, (Mouille Bouche.)—The pear cultivated in this country, under the above name, deserves to be classed among our finest fruits. It bears abundantly every year, and

appears to be very distinct from the pear of the same name, described in the new edition of *Duhamel*, and the London Horticultural Society's *Catalogue*. Succeeds on pear and quince.

Marie Louise, continues to be fine and productive, grafted on the pear and quince.

Naumkeag.—This handsome pear, which has rather too much acid for some persons, is large, productive, and good.

Pope's Quaker.—Large; bright yellow russet; produces great crops of handsome and good fruit every season; probably a native.

St. Ghislain.—Tree of vigorous growth; great bearer; fruit fine, high flavored, and excellent.

Surpasse Virgoulouse.—Of medium size; abundant bearer; tender, juicy, and fine; name doubtful.

Sugar Pear of Hoyerswerda.—Fruit of middle size; skin, a light, or yellowish green: sweet, juicy, and good, very peculiar flavor; one of the greatest bearers known; grows well on the quince.

Surpasse St. Germain.—A fine early winter pear; very high flavored, and a great bearer.

Rousselet Hatif.—Coxe says that this is more generally admired than any other summer pear; to this opinion, we can, after several years' experience, cheerfully subscribe. We have not yet been able to identify it with the pear of the same name, described in the old edition of *Duhamel*. Grows well on the quince.

Urbaniste continues to be a first rate and productive pear.

Washington.—Fruit of middle size, very handsome and good. Tree remarkably upright in its growth.

Winter Orange.—The size is small; the form round or flat. A most abundant bearer, always fair and smooth; a good winter table fruit.

Winter Nelis.—This pear continues to be a great favorite in England. We think it one of our finest early winter pears.

Bloodgood.—This new American pear was first introduced to notice by the late Mr. James Bloodgood, of Flushing, L. I. We think it a very fine early fruit, of large size, and an early and abundant bearer; ripens in August.

Frederick de Wurtemberg, (of Van Mons.)—Very large and beautiful; bears abundantly. We have always grown it on a standard tree; have never seen it grafted on the quince. [This is sometimes noticed in the reports of the Massachusetts Horticultural Society, as the *Roi de Wurtemberg*, and the *King of Wurtemberg*.—*Ed.*]

Cushing.—One of the finest of the American pears; the fruit always fair and good; it bears well every year, but not so much as to prevent the rapid and healthy growth of the trees.

The following I have not previously noticed in your Magazine.

Beurré d'Arenburg.—Figured and described in the *Pomological Magazine*: very productive, high flavored, and excellent; can be grown either on the pear or quince.

Beurré Sutin.—Middle size, obovate; yellow skin, mixed up with russet; high flavored and excellent. First fruited in this country in 1839; scions were received from Dr. Van Mons.

Beurré d'Amalis.—The scions of this new pear were received from the London Horticultural Society. It is a first rate fruit, ripening in September and October.

Beurré Bronze.—Large, and very productive; the color brownish red and dull green; excellent.

Bezi de la Motte.—Although this has been classed with the old pears, it is only so when compared with more recent productions. In Evelyns' edition of *De la Quintine*, 1717, it is called a new pear. It exhibits no signs of blight or decay, and is very fine and productive, either on the pear or quince stock. Ripens in October.

Beurré Capiaumont, (of Van Mons, and London Horticultural Society.)—A great bearer, and excellent, grafted either on the pear or quince stock.

Columbian.—This native pear was introduced by the late Mr. James Bloodgood, of Flushing, L. I.; it is a fine fruit, of large size; ripe in October and November.

Cabot.—This new and very superior pear is subject to crack, when grown on standard trees in an exposed situation; it well deserves a trial, grafted on the quince, and trained to a wall or espalier.

Beurré Duval continues to be very excellent and productive.

Hessel.—One of the greatest bearers; a good fruit, but lasts only a few days.

Petre.—This fine pear continues to support its high character; in any collection it would be prized as a first rate fruit.

Passans de Portugal.—The size is small, round, or bergamot shaped; not high flavored or rich, but very pleasant and good; bears very young, and most abundantly.

Rostiezer.—We have never seen this new pear grown on a standard tree; when grafted on the quince, the fruit is of medium size, high flavored, and excellent; ripens in September.

I have omitted any notice of the fine old pears which cannot be grown in orchards; but from the experience we obtain, every fruit season, there is no doubt that they can, all of them, be raised in the protected gardens and yards of the city, or in the country, trained to a wall or common fence. The fruit obtained by this method of cultivation, is not inferior in size, beauty, or flavor, to the finest productions of former years.

I beg leave to observe, that one great error, in my opinion, in the cultivation of pears, is suffering the trees to bear such enormous crops. I have observed that the Heathcot, Julienne, Dearborn's Seedling, and many others, often, from this cause, produce fruit of very small size, and deficient in flavor; the trees also become debilitated. I have commenced the practice of cutting out about two thirds of the fruit spurs, with manifest advantage, as even the production of so many buds, and the great quantity of blossoms, tends to destroy the vigor and retard the growth of the trees.

I observe, in the pomological notices, by Mr. R. Thompson, in the *Gardener's Magazine*, that he either recommends, or notices favorably, the following pears as deserving trial. I believe none of them have produced fruit in this country. I have all in my collection, and hope, the next season, to be able to decide upon their merits, in this climate, viz:—Fondant Van Mons, Emerald, Eyewood, Compte de Launy, Fingals or Ellanrioch, Marie Louise nova, King Edward, Belmont, Brougham, Croft Castle, Dunmore, Broompark, Rouse Lench, Pengethly, Monarch, March Bergamot, Dowler's Seedling, Drapiez d' Eté, Beurré Romain, Hepworth, Yutte, Jeschil Armudi, Althorp Crassane, Winter Crassane, Fondante d' Autumn, (probably our Belle Lucrative.)—*Respectfully yours, R. Manning, Salem, Feb. 1840.*

PLUMS.—Plums have been more sought after and planted, within a few years, than heretofore, and many of the more choice and new varieties may now be found in all good collections of any extent. No summer fruit can exceed, in richness and beauty, the best varieties of plums—such, for instance, as the green Gage, Washington, Golden Drop, &c. These large, showy, and fine flavored kinds have given the plum a new claim upon the amateur's attention; and, as their cultivation is attended with as little care as the smaller and inferior kinds, so long almost exclusively grown, we hope to see them gradually taking the place of the latter in every garden.

The ravages of the curculio, in the destruction of the fruit, and the spread of what has been termed, by some cultivators, a disease of the tree, but which is undoubtedly to be attributed to the attacks of a small insect, has prevented many growers of fruit from planting the same number of plums that they have of other fruit; pears seem to have been chosen in preference to the plum, as requiring less attention, and being more certain in their product. Though this may be true, if only the same care is bestowed upon the former as the latter, it is not so if proper attention is taken in selecting good sorts, planting in favorable situations, and destroying the insects which are peculiar to the plum. It cannot be expected that trees will produce fruit abundantly, unless they receive some attention. The plum is as hardy as the pear, and thrives better in many localities than the latter, while the fruit comes in at a season when the really excellent varieties of the pear are not near ripe. We know there are cultivators of fruits who have, in a degree, discarded the plum from their gardens, planting, perhaps, but one or two trees, on account of the disappointment which has been experienced from the causes above named: but we hope that such prejudices may be done away with, and that the superior new varieties will be considered of sufficient merit, to deserve all the care necessary to render the trees vigorous, and productive of such delicious fruit. Some of our correspondents have written at length on the cultivation of the plum, Vol. II, p. 161,) to which we refer our readers.

The production of seedling plums has, till within a short period, been more the result of chance, than that of any systematic course pursued for the purpose of raising superior sorts; and we may hence infer, that, if such great improvement has been effected without method, with it, results more important than we now anticipate will be gained. In England, the late Mr. Knight, and other growers, have produced several excellent sorts, now well known in collections; but they have not equalled some of those which have been discovered by accident in our own country. The climate, too, of England, is not so favorable for ripening the plum, and, consequently, the production of superior kinds, as our own. We may, therefore, reasonably suppose, that with a superior stock to start with, and a more genial climate to grow them, that new varieties may be raised, which will excel any foreign fruits which we possess.

Among those who have contributed most to the stock of seedlings, may be named Henry Corse, Esq., of Montreal. This gentleman has made the production of seedling plums a

study for some years, and has raised several very fine varieties, one of which, the *Nota Bena*, though not yet very widely disseminated, is known as a superior plum in our collections. This variety was raised some years since, and the grafts distributed by Mr. Corse, together with three or four others, among which were the *November gage*, and *Field Marshall*; but from some cause, neither of the latter are known to exist in our gardens. Scions were received and inserted by several amateur cultivators, but they either did not grow, or, from inattention, the names were subsequently lost, as no fruits have been shown, though in one or two instances, plums have been exhibited under the same names, that have answered the descriptions which accompanied the scions.

Since these scions were distributed, Mr. Corse has raised thousands of seedling trees, with the ultimate hope of procuring something which should excel any existing varieties; and, we believe, his efforts have been at last crowned with success. From the great number he has selected several which promise well, and to three or four of them, of which there is no doubt of their excellence, he has appended names. One of these is unsurpassed in size, flavor, and beauty, and other properties, which constitute a first rate variety. We hope to be able, in a short time, to give some account of them from Mr. Corse himself, and, in the mean time, we annex a brief notice of those which he described to us the past autumn, while on a visit here. We hope his example, and the success which has attended his experiments, will induce others to make attempts to raise new and superior varieties.

Dictator.—This is one of the largest and finest plums ever produced, exceeding in size the *Magnum Bonum*, or the *Bolmer's Washington*, and equalling in flavor the green *Gage*. The color of the skin, is a brownish purple, covered with a beautiful bloom. The flesh is juicy, rich, and high flavored; the stone very small. The tree is of vigorous growth, and among the hardiest varieties cultivated, even as far north as *Montreal*. It is but two years since it first fruited, but Mr. Corse thinks very highly of this seedling.

Victoria.—This is another seedling, a very large red fruit, of handsome appearance, good flavor, and worthy of being found in every collection of plums.

Col. Wetherell.—Another seedling, equally fine with the last named. It is one of the very latest plums cultivated, which renders it highly valuable, as it is also of most excellent quality. This, and the last named variety, Mr. Corse has not yet fruited sufficiently to speak as confidently of their excellence, as of the *Dictator*.

In addition to these, we notice the following varieties, of rather recent origin.

Royal Hative.—This is a new variety. Mr. R. Thompson lately read a notice of it before the London Horticultural Society. The author stated that, although a purple plum, matching, in point of flavor, the green gage, had already been discovered in the Reine claude violette, yet that it had still remained an object of importance to procure new varieties of equal excellence, whose periods of maturity should be different. This had now been, in one respect, attained by the discovery of the variety in question. It was received into the Society's collection from the nursery of M. Noisette, of Paris, and fruited for the first time the past season. It is mentioned in the *Almanach de bon Jardinier*, and in *Noisette's Manual*, p. 494, where it is described as a large violet fruit, with a flavor resembling that of the Reine claude violette. It appears to be quite distinct from every other variety, except, perhaps, one called Mivian, of which scions had been received from M. Stoffels, of Mechlin, and which will probably prove synonymous, in which case the name proposed by M. Stoffels would have to be adopted. The plum is described by Mr. Thompson as follows:—

Fruit fully larger than that of the Reine claude violette, to which, in appearance and flavor, it has great resemblance. In form it is roundish; the few specimens examined were rather broader next the stalk, which is about half an inch in length, thick, and not inserted in a hollow. Skin purple, dotted, and traced with a golden brown. Flesh yellow, slightly adhering to the stone, but parting from it when ripened. Flavor exceedingly rich. Stone small, ovate, compressed. Shoots very downy; leaves slightly pubescent above: two characters which will always prevent its being confounded with the Reine claude violette, the shoots and leaves of which are smooth. It ripens about a fortnight or three weeks before the Reine claude violette and green Gage.

The Reine Claude Violette.—This variety, has been previously noticed, (Vol. II., p. 162,) by one of our correspondents; and by us, in our last volume, (p. 409,) as being in the collection of Mr. Ives, of Salem. Mr. Ives remarked to us, in walking round the garden, that it was a most excellent fruit. At a late meeting of the London Horticultural Society, grafts of it were distributed among the members; and Mr. Thompson remarks, that it is "one of the few purple plums, of which the flavor will bear comparison with that of

the green Gage." We hope to see it introduced into all amateur collections, together with the Royal hative.

Knight's large green drying Plum.—This is the name given to a new variety, raised by the late President of the London Horticultural Society, Mr. Knight. It is stated to be as large as Bolmer's Washington, and superior to it in point of flavor. It fruited, for the first time, in the fall of 1838; its merits as a preserving pear are not yet known, but as a dessert fruit it will doubtless rank high.

Nonsuch.—Another new seedling plum, under this name, was exhibited before the London Horticultural Society, Sept., 1838. It is said to be a seedling raised between the green Gage and Coe's seedling, and to be a fine variety, and an abundant and never failing bearer. The color of the fruit is not mentioned: raised by John Luscombe, Esq., of Coombe-wood, in Devonshire.

The Nectarine plum proves to be an excellent bearer and fine variety; its only fault is, that of easily losing the bloom off the fruit.

La Royale, la Delicieuse, Coe's late Red, and Milton Gage, are the names of four new kinds which have fruited in the nursery of Messrs. C. & A. J. Downing, Newburgh, N. Y. We anticipate the pleasure of offering some account of them, and their relative merits, as deserving general cultivation, from our attentive correspondents.

Cruger's Seedling.—This variety was first introduced to notice by our correspondent, A. J. Downing. (Vol. I., p. 365.) It is yet but little known. In the garden of Mr. Ives, of Salem, it produced fruit the past year. It is a handsome and fair sized plum, with a lilac colored skin; it promises to be valuable fruit.

ART. IV. *Method of preserving Celery through the winter for family use.* By J. W. RUSSELL, Superintendent of Mount Auburn.

As a completion of my article on celery, published in your January number, I send you my method of preserving it for use through the winter. Celery must be taken up in the autumn, before it has been, in the least possible way, injured by frost; as I am confident that, if the tops are frozen, it affects, directly or indirectly, the whole root.

A fine dry day, of course must be chosen for the above mentioned purpose. When the celery is all taken up, cut off *all* the fibrous roots and *all* the green tops, and lay it singly on boards, in an airy shed, to dry, two or three days; turning the whole over once or twice a day will be necessary, in order that every part may be as free from moisture as possible; if this part of the process has been duly attended to, after the third day the celery will be in good order for the next and last operation, which is as follows:—

Having plenty of *dry* sand at hand, place about three inches, in depth, of the same, at the bottom of a flour barrel, or any other kind of barrel will answer, provided it is clean and dry; then lay the celery flat on the sand, and so continue on, with the sand and celery *alternately*, until you finish at the top with sand, about four inches of which should be placed over the last layer of celery, and the work is completed. A dry, cool place, where it never freezes, is to be preferred to keep it in. The operator need not be in the least alarmed, if he finds that it has shrunk a little from the operation of drying; for it will immediately become plump again after packing. He should have faith in the method, and he will be sure to succeed.

J. W. RUSSELL.

Mount Auburn, Cambridge, Feb. 1840.

The above method of keeping celery, by Mr. Russell, is probably as new to most of our readers as it is to ourselves; but we doubt not it will succeed: indeed we have never found much trouble in keeping celery, provided it was not ruined by *repeated freezing and thawing* of the foliage and stems, before it was dug up in the autumn. This part of Mr. Russell's remarks should be kept in view, as without strict attention to this, the object will not be accomplished.

Mr. Russell's remarks, we apprehend, apply only to preserving celery for family use *during the winter*. When a large quantity is grown, and it is desired to keep part of it until spring, before it is wanted, the best method will then be to protect it in the situation where it was grown. This, at least, has been our plan, and we have found it to be attended with complete success. The manner in which we have proceeded to do so, has been as follows:—Before frosts, severe enough to injure the tops, occur, we cover up the ridge formed by the earthing up of the stems, with leaves, sea-weed, or coarse straw, preferring either of the two first to the latter: this covering should extend down the sides of the ridge, and should be about six inches thick, and should be put on in rather a dry state. This

covering is to be immediately protected with boards, put up in the form of a ridge also, so as to carry off all the rain, or water which may be formed from the melting snow, in the months of February and March. The top board on the east side, if the rows stand north and south, as they always should do, unless very inconvenient, should project over that, on the west side, from half an inch to an inch, thus allowing no chance for the water to find egress immediately over the roots. By this means, it will be carried away, and if the surface of the garden admits, the earth should be so thrown out in the autumn, as to allow the surplus water in the spring to be carried off from the ground in which the celery is planted.

By the middle of March, unless that month should be very severe, the ridge may be opened at one end, and the celery dug for use; and it may afterwards be dug from time to time, as it is wanted, and it will be found as fresh as if it had been dug in the preceding autumn. We have fully tried this plan, and can recommend it from our own experience.

It should be always borne in mind, that celery, intended for winter or spring use, should be of the large, giant, solid kind, and not the little pipe-stem, suckery variety, generally grown, which is only fit for early fall use, and, at the best, barely worth growing at all. Bailey's red or white giant, and Law's silver giant, are new sorts, deserving of extensive cultivation, and every one who appreciates good celery, should be particular, and obtain one or the other of them. Attention to this, and procuring seeds which *can be relied upon*, will prevent much disappointment, and repay the cultivator for his trouble.—*Ed.*]

ART. V. *Observations upon the production of new and fine varieties of the Camellia japonica from seed.* By T. DUNLAP, New York.

THE camellia, in my opinion, is the most lovely gem that Flora has furnished us with. The varieties, already in our collections, are very numerous, and embrace many splendid flowers; yet, there is not much doubt but that seedlings may be produced which will equal, if not excel, any we now possess. The raising of seedling plants should be attempted by every amateur of camellias. The process is easy and simple; but as none of your correspondents have particularly alluded to the

subject, I am induced to offer a few remarks upon the method which I have pursued for the production of new and desirable varieties.

Those who have written upon the camellia, and the growth of seedlings, have generally stated that the warratah is the best variety for producing new and superior flowers. Although I would not presume to say they have been incorrect, I would observe, that, in my own practice, I have been more successful in raising fine varieties from those which are rose petaled, although, in many instances, but semi-double flowers, than from such as have full centres, as the warratah, *Pompônia*, *Pæoniiflora*, &c., the latter producing irregular flowers, less esteemed, by me, than well formed single ones. I have, however, used the farina of *C. var. punctata*, and *eclipsis*, on the rose petaled varieties, for the purpose of producing spotted flowers, with good success, as you will find by a reference to a previous number of your Magazine, (p. 23.)

In my opinion there are but few varieties better suited for the purpose of seeding, than the *coccinea*, *Middlemist's red*, (*rosea*), and *Chandleri*, although the petals of the latter are slightly heart-shaped, and the centre not quite what could be desired; still the colours are so vivid and the foliage so fine, (which I always keep in view,) that I esteem it as one of the best for producing fine seedling varieties. I would further beg to state, for the information of those who have had but little experience in impregnating flowers, that I cut out, with a pair of sharp scissors, the anthers of such blossoms as I intend to impregnate, as soon as they are sufficiently expanded to do so, and before they have time to burst open and discharge their pollen: this happens a day or two after the flowers expand, unless the house, in which the camellias are kept, is very warm, when they burst open much sooner. I then make use of a camel's hair pencil, and first breathing upon it, to make the pollen adhere, I select from the finest varieties, as above named, a flower, and taking from the anthers the pollen, I place it upon the stigma of those flowers which have been deprived of their stamens. I also find that the seeds set much more freely, when the thermometer is not suffered to fall below 60° Fahrenheit, at the same time placing the plants as near the greatest current of air as practicable.

Such is my practice; and if these few hints should be the means of producing but another fine camellia, I shall feel a great pleasure in having contributed my mite in the cause of floriculture.

T. DUNLAP.

Harlem, N. Y., January, 1840.

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ART. VI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1s. each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Floricultural Intelligence.—A splendid work, on the Cacti tribe, has been commenced in Berlin, under the direction of Dr. Louis Pfeiffer and M. Otto. It is an imperial quarto, containing eight lithographic plates, and five pages of descriptions, &c. It is sold at the price of one dollar, in London or Berlin, for the plain copies, and three dollars for the colored. The drawings are all made from cultivated plants in the public and private collections of Berlin, Munich, Dyke, Erfurth, and Canel. It will be a magnificent work, and worthy of perusal by every amateur and lover of this interesting and grotesque tribe of plants. The first number, published last autumn, contains six plates, comprising the following species; 1. *Echinocactus Sellowiana*, Link et Otto; 2. *Echinocactus centetaria*, *Lehm.*; 3. *Mammillaria bicolor*, *Lehm.*; 4. *Echinopsis multiplex*, *Zucc.*; 5. *Cereus Hookeri*, Link et Otto; 6. *Opuntia Saliniana*, *Parin.*; and *O. curassavica*, *Mill.* The plates are stated to be most elaborately executed, and exquisitely colored; the letter press copious in synonymes, descriptions, and directions for culture. (*Gard. Mag.*)

A collection of seeds from the Cape of Good Hope has been received at the public garden, by a late arrival from Cape Town. They have been planted by Mr. Donald, and among them are many handsome and desirable species.

In making up the annexed notices, in the absence of some of our foreign periodicals, we are indebted to the *Gardener's Magazine* :

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Ranunculaceæ.

PLATYSTEMON

lelocarpus Fisch & Meyer. An annual plant; growing to the height of a foot; with yellow flowers; appearing from June to September. *Flor. Cab.* Vol. II. p. 123

A species nearly allied to *P. californicus*. It is a vigorous growing annual, freely ripening seeds. It was raised in the Botanic Garden, Birmingham, from seeds received from Russia. (*Flor. Cab.*, Nov.)

Papaveraceæ.

Papaver amœnum is the name of a beautiful new annual poppy, raised in the garden of the London Horticultural Society, from seeds sent from the north of India. The flowers are vermilion, with a white base. (*B. M. R.*, No. 80.)

Ternstromiaceæ.

CAMELLIA

The show of camellias around Boston is not so splendid as it was last season. This does not arise from any reduction of the number of plants then grown, but from other circumstances: one of the causes of a less abundant bloom is the cautiousness of some amateurs in not allowing their plants to flower so profusely as they have heretofore done, to their great injury; but, in addition to this, one of the largest collections has changed owners, and, from the natural effect of change of situation, &c., the flowers have not been so numerous nor so fine as they were last year. In the public garden, to which we allude, many flowers have been expanded, and among them several new kinds; these will be noticed in another page.

In Mr. Sweetser's collection, now at Woburn, C. j. var. *Gilesii*, *imbricatà álba*, *tricolor*, *Vandesia supérba*, and *V. cárnea*, and some others have flowered; *imbricatà álba* is a fine variety, and a good addition to the light colored flowers; *tricolor* is singular and pretty, and a desirable plant. *Gilesii* is a very free flowerer; it somewhat resembles *Chándleri*, but the coloring is darker and richer, and the centre of the flower fuller of petals. *Donckelaéri* will also bloom early the present month; in addition to these, many of the older varieties are now finely in bloom.

In Mr. Wilder's collection C. j. var. *Donckelaéri* has been very splendid; the plant is strong and vigorous, and the flowers were exceedingly rich and splendid: though only a semi-double flower, the spotting and blending of the colors are so

different from any other variety, that it will be a great favorite in every collection; tricolor is also now in bloom, (Feb. 14;) nobilissima has flowered, and though a pretty variety, it is not to be considered first rate. Several other new ones will open in the course of the present month.

Among our own plants *C. j.* var. *triúmphans*, *nobilissima*, *Gilesii*, and *Cunningham's mutábilis* have flowered: the first named is a splendid variety; the color a rich pink, or rose, spotted more or less with white; the flower large and full, so much so as to render the bud difficult of expansion. Mr. Wilder has noticed this, while describing the *triúmphans* in a previous number, (p. 58,) and though our plant is small, we think, from the fullness of the flower, it will have a tendency not to open freely; we placed our plant in a slightly increased heat, and it expanded more freely; from which circumstance, we imagine, it should be placed in a higher temperature to perfect its flowers. *Cunningham's mutábilis* is a very handsome flower, somewhat in the form of the *élegans*. The color is a dark red, slightly shaded with white; the foliage is of a very rich, dark, glossy green, and the habit of the plant exceedingly neat. *Donckelaëri* and *tricolor* will both be in flower by the time this appears in print. *C. j. Schrynmakérsii* appears to be only a synonyme of *C. j. corállina*; *Vandèsta supérba*, *Flòyrii*, *althææflòra*, *speciòsa*, *imbricatà*, *Landréthii*, *élegans*, &c. are flowering finely, the latter expanding many most superb flowers.

Cactàceæ.

MELOCACTUS *deprèssa* Hook.

Synonyme, *Echinocactus deprèssa* Link & Otto.

This is a new species, which has "rewarded Mr. Gardeners' researches in the vicinity of Pernambuco," from which place it was sent to the Duke of Bedford's collection, at Woburn Abbey. The flower is at present unknown, but is supposed to be small and red, like those of other *melocacti*; the plants had blossomed "freely, previous to their having been embarked; and after their arrival copious seed vessels were produced, long, and of a delicate rose color, which, rising in a circle considerably above the crown of red aculei, presented an appearance perhaps more striking than the flowering themselves. (*Bot. Mag.*, Nov.)

EPIPHYLLUM

Russellianum Hook. *The Duke of Bedford's*. A green-house species; with pink flowers; appearing in April and May. *Bot. Mag.* 3717.

This species is common on the mossy stems of trees, and also occasionally upon rocks, among the Organ mountains. It is nearly related to the *C. truncatà*, but grows at a much

greater elevation. It was sent to the Duke of Bedford by Mr. Gardener, and is now added to his splendid collection. (*Bot. Mag.*, April.)

ECHINOCACTUS

Scôpa Hort. Berol. Broom Echinocactus. A hot-house species; with pale yellow and scarlet flowers appearing in April. A native of Brazil. *Bot. Reg.*, 1839, 24.
Synonym: Cactus Scôpa Link; Cereus Scôpa Dec.

A curious species of this curious genus, with pale yellow flowers, with a scarlet centre. It is called the broom cactus, from having the base of its stem so long and stiff, as somewhat to resemble a scrubbing brush. The drawing was taken from a specimen which flowered in the splendid collection of Mr. Harris, of Kingsbury. (*Bot. Reg.*, May.)

Onogræceæ.

FUCHSIA

cylindracea Lindl. cylindrical-flowered fuchsia. A green-house plant, growing two feet high; with scarlet flowers appearing in August. A native of Mexico. *Bot. Reg.*, 1861.

This is a splendid species, with long cylindrical flowers, very showy. Dr. Lindley remarks, in describing this species, that the female flowers of the genus *Fuchsia* are less showy than the male, not being half their size. He also observes, that some plants have all their flowers male, and others all female. (*Bot. Reg.*, Dec.)

Many new varieties of fuchsia have been obtained from seed by the means of artificial impregnation. A correspondent of the *Gard. Mag.* states, that he has raised some "splendid new varieties between the *F. fulgens* and *F. grandiflora*. The plants partake much of the character of *F. fulgens*, in respect to flower, foliage, and habit; being strong growers, free flowerers, and having every shoot with a terminating panicle, or bunch of large handsome flowers." All who have seen these hybrids, allow them to be superior to any that have yet been produced. Six of these have been named and described as follows:—

F. majestica.—Flower, including the foot stalk, four and a half inches long; flower two inches across; strong growing, broad and fine foliage.

F. fulgida superba.—Flowers three and a half inches long; very compact; foliage large, dark green; a neat grower.

F. multiflora erecta.—Flowers three inches long; plant a neat grower; a very abundant flowerer, with neat foliage. It received an extra prize at the North Riding Horticultural Society, in July last.

F. grandiflora maxima.—Flower five and a half inches long, and two in diameter; splendid large foliage, and the plant with an elegant habit.

F. stylôsa conspicua.—Flower three and a half inches long; globular.

F. pendula terminalis.—Flower two inches long; dwarf habit, broad foliage, pendulant, and terminating in large clusters of flowers.

These must be most valuable additions to this beautiful tribe, so generally neglected by our amateur cultivators. We hope that some of the above will find their way into our collections, and, by their elegance, induce cultivators to give more attention to their growth. *F. fulgens* has already flowered in some collections around Boston and New York, and *grandiflora*, and some other species, are old inhabitants of our green-houses. The success which has attended the production of new varieties, as above described, we trust will induce those who possess the *fulgens* and any other species, to try hybridization between them, in order to produce new varieties. Some fine flowers may be the result.

Thymelæacæ.

PIMELEA

Hendersoni Graham. Mr. Henderson's Pimelea. A green-house plant; with pink flowers: growing two feet high; appearing in July. A native of King George's Sound. Increased by cuttings. *Bot. Mag.*, 3721.

Another beautiful species, which Dr. Graham thinks should be placed between *P. decussata* and *P. rosea*. It forms a neat shrub, with a profusion of beautiful pink blossoms, and will be a fine acquisition to green-house collections. Raised by Mr. Henderson, of Edinburgh, from seeds received from King George's Sound, in 1837. (*Bot. Mag.*, April.)

P. prostrata is the name of a new species lately introduced, and called in the nurseries *P. Novæ Zelandiæ*. It is said to be a native of arid mountains in New Zealand. (*B. M. R.*, No. 81, July.)

Rosacæ.

POTENTILLA ferruginea. *Pax. Mag. Bot.*, Vol. V., 923.

A new hybrid between *P. atrosanguinea* and *P. pedata*. The flowers are of a deep orange, richly tinted with dark brown: the foliage resembles *P. pedata*. Raised from seed about three years since. (*Pax. Mag. Bot.*, Nov.)

Leguminosæ.

Mimosa marginata Dec. is noticed as a "shrubby plant, half hardy, prostrate, and producing long slender shoots, which have an elegant appearance, if allowed to hang down from the rafters of a green-house." The flowers are purple, and on long peduncles. It is a free growing species, and is readily and rapidly increased, as the branches, if suffered to rest on the ground, in the open border, throw out roots at every joint. It is sold under the names of *M. mexicana*, *scandens*, and *prostrata*. (*B. M. R.*, Nov., No. 152.)

CHOROZEMA Dicksoni, R. G. Mr. Dickson's chorozeama. *Botanist*, 101.

A species with larger flowers than most others of the genus. The flowers are scarlet and yellow. It was raised from seed received from Swan river. (*Botanist*, Feb.)

varium Benth. various leaved Chorozeama. *Bot. Reg.*, 49, 1839.

Another elegant and showy species, with orange and crimson flowers, and greenish-grey foliage. Introduced from Swan river in 1837. It is a vigorous growing plant, and cuttings of the half ripened wood root readily. (*Bot. Reg.*, Sept.)

C. Henchmanii is now in bloom in Mr. Towne's collection.

INGA

Harrisii Lindl. Mr. Harris's inga. A climbing green-house shrub; growing twenty feet high: with pink flowers appearing in February. A native of Mexico: introduced in 1838. Increased by cuttings; grown in loam, peat, and sand. *Bot. Reg.*, 41, 1839.

A very elegant climbing shrub, with beautiful flowers, produced in great abundance. It flourishes best in a temperature rather above that of a common green-house, and delights in a rich, fresh soil, formed of good loam and peat, and about one fourth fine sand. Imported from Mexico by Thomas Harris, Esq., of Kingsbury, after whom it is named. (*Bot. Reg.*, Aug.)

ZICHYA Baron Hugel.

The genus *Zichya* has been formed out of the old genus *Kennédya*, in compliment to the Princess Metternich, whose maiden name was Countess Molly Zichy Ferraris. The following old and well known species of *Kennédya*, consequently, should be recorded under the genus *Zichya*, viz., *dilitata*, *glabrata*, and *coccinea*. (*Bot. Reg.*, Sept.)

Portulacææ.

Portulaca grandiflora var. *rutila*. This is a brilliant variety, with very large, bright, crimson flowers, and "large, cylindrical leaves." *P. grandiflora* and *Gilliesii* have been noticed previously, (Vol. V., p. 363,) and this will be another fine addition to collections.

Ruticææ.

CORREA *ferruginea* Hook. ferrugineous correa. *Botanist*, 194.

A genuine species from Van Diemen's Land, where it was discovered by Major Dunn. It forms a handsome shrub, with elegant foliage. The flowers are greenish white, and large and well shaped. It will be a good species for hybridizing with the *speciosa*. (*Botanist*, June.)

Oxalidææ.

OXALIS *Darvelliana* Dr. Darvell's oxalis. Floral Cabinet, No 93.

A delicate species, shy in producing flowers, and still more shy in expanding them. It has a tuberous creeping root. The flowers are white, bordered with red, but nothing is said

of the season of flowering, or the mode of treating the plants. (*Floral Cabinet*, March.)

O. cernua, *rosacæa*, and *versicolor* are now blooming profusely in our collection, and are pretty ornaments at this season of the year. We regret that they are not more generally cultivated.

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Ericaceæ.

ERICA pseudo-vestita Bot. hybrid clothed heath. Botanist, No. 104.

A pretty hybrid with pink flowers, appearing in May. It was raised from seed by Mr. Williams, gardener to John Wilmore, Esq.: it is probably from seed of *E. vestita*. (*Botanist*, Jan.)

AZALEA.

The following new varieties of *Azalea indica* are enumerated in the *Gardener's Magazine*, as being in the collection of Barou Zanoli and M. Ulrich, near Milan, viz:—

<i>A. indica</i> elata fl. pl.	<i>A. i.</i> Mazeppa
— — salmon colored	— — <i>neriifolia</i>
— — <i>cærulæscens</i>	— — <i>Præsei</i>
— — <i>supérba duplex</i>	— — <i>Rawlinsònia</i>
— — <i>caryophyllea</i>	— — <i>rotundifolia</i>
— — <i>Diána</i>	— — <i>supérba venústa</i>
— — <i>Hòokeri</i>	— — <i>Simsiána élegans</i>
— — white Perfection	— — <i>speciosíssima</i>
— — <i>Woodfordiána</i>	— — <i>triúmphans púlchra</i>
— — <i>láctea floribúnda</i>	

We presume varieties under these names, may be purchased of the French nurserymen.

Epacridææ.

EPACRIS impræssa parviflora Lindl. Small flowered Epacris. Bot. Reg., 19, 1837.

A variety with deep red flowers, so abundant as to be very beautiful. The variety was received from New Holland, under the name of *E. ruscifolia*. It is a fine addition to the tribe. (*Bot. Reg.*, April.)

impræssa (?) *coccinea* Pax. Scarlet Epacris. Paxt. Mag. Bot. Vol. IV., p. 123.

A hybrid variety, with scarlet flowers and yellow anthers, raised, probably, from the seed of *E. impræssa*, by the gardener of Alderman Copeland, of Leyton, in Essex. Its showy scarlet flowers will add much to the brilliancy of the group of which the genus is now composed. (*Pax. Mag. Bot.*, July.)

Campanulææ.

ROSELLA

élegans Pax. Elegant Rosella. Pax. Mag. Bot., Vol. VI., 27.

An elegant little species, requiring the temperature of the hot-house, in which situation it will flower throughout the win-

ter months. It grows about one foot high, with pink flowers. It should be kept in a small pot on a dry shelf, by which treatment it will bloom and seed freely. (*Pax. Mag. Bot.*, March.)

Lobeliaceæ.

LOBELIA ramosa Benth. Branching lobelia. *Botanist*, No. 93.

A free growing, perennial species, with dark blue flowers, attaining to the height of two feet. It was raised in the garden of the London Horticultural Society, from seed received from Swan river, by Capt. Mangles. It remains in flower, in great beauty, from June to October, and grows very freely, both planted singly or in beds. It also continues to flower for a long time after being gathered and placed in a room. It requires the protection of a frame or green-house, during winter. This species will form a pretty companion to petunias, verbenas, &c., when planted in beds or groups. (*Botanist*, Nov.)

Compositæ.

HELICHRYSUM macranthum Benth. Large flowered Helichrysum. *Bot. Reg.*, 58, 1839.

A beautiful annual from Swan river, and said to have been first brought to Europe by the Baron Von Hugel, who first raised plants of it in his garden, near Vienna. It somewhat resembles the common white variety of the *H. bracteatum*, (eternal flower,) but the flowers are much larger, and of a rich cream color, rather than pure white; and the petals have beautiful rosy tips. It is stated to require to be kept in the green-house. There is, however, but little doubt that, in our climate, it will, by early sowing, produce as fine flowers in the open border, as the common white. (*Bot. Reg.* and *Pax. Mag. Bot.* for Dec.)

STEVIA fascicularis Dec. Close headed Stevia. *Bot. Reg.*, 59, 1839.

Like the odorata, it is a pretty, sweet scented green-house plant, growing a foot high, with cymes of white flowers. It is a native of Mexico, and the seeds were imported by G. F. Dickson, and presented to the London Horticultural Society. (*Bot. Reg.*, Nov.)

Centaurea pulchra, Dec. A beautiful new annual, under this name, was raised in the London Horticultural Society's Garden last year, from seeds collected in the north of India, by Dr. Falconer. The flowers are deep blue, inclining to violet in the centre, with a silvery involucre. (*B. M. R.*, No. 84, July.)

Cineraria frAGRans is now in bloom in our collection. It is nearly, if not quite, as fragrant as the heliotrope. It grows about two and a half feet high, producing large heads of pale

blue flowers. It is one of the most desirable species, being beautiful as well as fragrant.

Gesneriæ.

GESNERIA stricta Hook & Arn. Upright Gesnera. Bot. Mag., 3738.

A handsome species from South Brazil, with scarlet flowers; resembling in habit the *G. spectrum* of Martius, but with very different shaped flowers, the corolla having a remarkable curvature on the upper side, and following in its direction; the style is singularly geniculated at its base. Sent by Mr. Tweedie to the Glasgow Botanical Garden, and flowered in 1835. (*Bot. Mag.*, July.)

Marchii Walles Mr. March's. Bot. Mag., 3744.

A distinct species, producing an abundance of rather pale [scarlet] and rather small flowers. It was found in the Organ mountains. It is a tuberous rooted species, requiring the temperature of the green-house. (*Bot. Mag.*, Aug.)

GLOXINIA maxima, greatest Gloxinia. Pax, Mag. of Bot., Vol. V., 219.

A hybrid, raised in the Epsom Nursery, between *G. candida* and *G. spinosa*. It has a very large white flower, with a stain of mazarine blue or purple in the mouth of the corolla. (*Pax. Mag. of Bot.*, Nov.)

MONOCOTYLEDONOUS PLANTS.

Iridæ.

MARICA gracilis W. Herb. Slender marica. Bot. Mag. 3713.

An elegant species, a native of Brazil, from whence it was sent to the collection of the late Duke of Bedford. It bears the most resemblance to *M. Northiana*, but is much more slender, and with smaller flowers. Grown in the green-house. (*Bot. Mag.*, March.)

ART. VII. Notes on Gardens and Nurseries.

Country residence of T. Lee, Esq., Brookline, Sept. 1839.— Since we noticed Mr. Lee's place, in the fall of 1836, there has been quite a change in the aspect of the grounds. The American shrubs, many of which had then but just been planted, had now attained the size of large bushes, and were loaded with flower buds for another year. The plants of the *Rhododendron maximum*, *Kalmia latifolia*, *Magnolia glauca*, &c., are the finest cultivated specimens we have ever seen. Mr.

Lee spends a greater portion of his time in efforts to introduce all the beautiful American shrubs and plants into his grounds, and he has been most signally successful in his cultivation of the numerous species which abound in his collection.

Back of the house, at the time we were here before, Mr. Lee was cutting away and thinning out the trees of a dense piece of wood which he had added to his grounds. This has been so judiciously executed, that it is now one of the most interesting parts of the place. A walk has been laid out around it; this in some places leads over and along the highest parts, from which fine views are obtained of the surrounding country; in others it descends into the lower parts, amid groups of rhododendrons, kalmias, and fine flowering plants, along shady walks and under portions of the wood, from whence the house and lawn in front, as well as the higher parts of the grounds, are seen to great advantage. Rustic seats are erected in several places, and the walk is thus rendered one of the most interesting features of the grounds.

The green-house was undergoing alterations and improvements: it was extended to twice its former size; a span-roofed addition was made; in this Mr. Lee had just had erected a pit in which he intends to plant roses; his collection of this beautiful flower embraces all the finest varieties, mostly budded upon the Boursault, or four seasons—which stock Mr. Lee thinks well adapted for that purpose; the Noisette rose, known as the Adelaide d'Orleans, also makes a vigorous stock. On one Boursault stock, Mr. Lee has now budded the yellow tea, blush tea, yellow Noisette, and one or two other sorts; the beautiful specimens which he has from time to time exhibited at the rooms of the Massachusetts Horticultural Society have been noticed in our reports. No cultivator has excelled Mr. Lee, and the means which he has now taken to increase his collection will enable him to produce still finer specimens than any which he has heretofore shown. Mr. Lee pointed out to us, as we were leaving, a lot of rhododendrons and kalmias, which were planted out in August. They were taken from the native habitats at that time, and immediately planted by Mr. Lee in places which had been previously well prepared by digging, &c.; the roots were also immediately mulched with leaves, &c. to keep the ground moist, and no check which could be perceived, was made in their growth. At this period they looked as fresh and vigorous as those which had been planted out a year or more. Mr. Lee is decidedly of opinion, that August is the most favorable period for setting out these plants.

A variety of new annuals and several American plants, which are rarely seen out of their native places, were blooming near the house, but we were prevented from noticing them at this time.

Residence of S. G. Perkins, Esq.—Mr. Perkins is well known as one of our most zealous cultivators of fine fruits. His forcing houses, for the cultivation of the grape, are of considerable extent, and large crops are produced every season. At this time, very few grapes were remaining upon the vines, as they are forced early, and were nearly all cut.

In the open ground, the show of pears was very fine. We noticed some of the largest and most beautiful specimens of the Duchess d'Angouleme, on espaliers, that we have ever seen. Standard trees, and dwarfs of other sorts, have produced in abundance, but Mr. Perkins not being at home, we could not ascertain the names. At some future period, we hope to notice, at some length, this excellent collection of fruits.

Mr. Winchester's, Franklin street, Boston, Jan. 1840.—The green-house attached to Mr. Winchester's garden, is now one of the finest structures of the kind in the city. It was rebuilt in the fall of 1838, and is twice as large as its original dimensions. It is also well stocked with a good collection of plants. The camellias were just coming into bloom, and among them were several fine varieties. Several rhododendrons were swelling their buds; heaths, and other plants, were blooming profusely, and a fine display of flowers would be presented in a few days. Mr. Winchester is mostly his own gardener, and the plants were in fine condition under his management. We wish that there were more such green-houses attached to the gardens in the city. During our long and dreary winter is the period when flowers are most welcome, and the gratification to be derived from even the smallest structure, devoted to plants, will well repay the small cost of the building. Mr. Winchester's is connected with his dwelling, and is entered from a hall leading from the main rooms of the house.

Mr. Towne's, Snowhill street, Feb. 4th.—We have never had the pleasure of visiting Mr. Towne's collection, when we have found it in so beautiful condition. Nothing can excel the vigor and elegance of the heaths, which are completely clothed with foliage, from the base of the stem to the tops of the branches. Mr. Towne may indeed be said to have carried the culture of this lovely group to a high degree of excellence; to say that the plants present a better appearance than

any others we have ever seen, would not convey any correct idea of their vigor, health and beauty. They must be seen to be appreciated, for without an examination of the plants, it would not be believed, from the specimens which are generally seen, that the heath could be grown in such perfection. We have ourselves been somewhat familiar with growing heaths, still we could scarcely believe that the plants could be grown to the size of many of Mr. Towne's specimens, and at the same time covered with foliage and flowers. A plant of *Erica tubiflora*, and one of *pubescens*, each at least six feet high, and grown to that size in the short space of three years, were covered with thousands of flowers.

We have in a previous volume (IV., p. 243,) given a list of the principal species which Mr. Towne has in his collection. Since that period he has added a few new ones, but none of them were now in bloom. Among those which were in flower, which we thought fine, may be noticed the following:—*E. Bonplandia*, a vigorous species, with deep green foliage, rather the deepest and richest of any in the collection, and yellow, tubular, flowers, in long spikes, clothing the main stem for more than eighteen inches in length; *E. rubida* is constantly in bloom, and even the smallest plants flower freely; *E. caffra* (?) one or two large specimens of, were literally white with their snowy corols; a seedling plant, probably a variety of *E. arborea*, with fragrant, vanilla scented, white flowers, was very fine. *E. Pinea* had been splendid, but was now passing off; *gracilis*, and some others, were also blooming profusely.

The epacris have been among the most graceful ornaments of the collection, during the first part of the season. Numerous plants of *E. grandiflora* and *impressa* had been exceedingly fine, with their delicate flowers almost covering every part of the plants; a few lingering blooms of *impressa* were to be seen in all their freshness, but the beauty of the plants was past. Besides these, *E. palludosa*, (not the one generally cultivated by that name in collections,) *variabilis*, and one or two others, had been in flower. Mr. Towne is equally as successful in the growth of the epacris, a plant which has been considered, even by the most skilful cultivators, as difficult to manage, as the heath. The growth which many young plants have made, not yet a year old, is astonishing. His able article in our last volume (V., p. 376,) is one of the best and most valuable papers we have ever published, and to the lover of the heath and epacris is worth five times the amount of the price of our Magazine. The camellias were also blooming well; among

them *C. var. elegans*, speciosa, double striped, *Welbáncia*, &c. *Zichya coccinea*, *Gnida pinifolia*, *Lechenaúlia formosa*, *Eriostemon cuspidatum* (elegant,) *Polygala grandiflora*, *Acacia verticillata*, and many other plants, were blooming abundantly. We had not time to note down all the pretty things, and if we had done so, it would not have been in our power to speak of them all at this time. We have not enjoyed so rich a treat for some time.

Conservatory of the Public Garden.—It is now nearly, or quite, a year, since this place was opened: what success has attended its establishment, ending the year, we are not informed; but we believe it has been as well supported as could have been expected. Since last spring, considerable alterations and additions have been made, some of which we have noticed. Two reserve houses, for bringing forward plants, have been erected on the west side of the conservatory, which are now filled with plants. The angles which form the square of the building, from whence the domical roof commences, have been also glazed, and now serve as separate apartments, by means of divisions, for different plants. The arrangements for showing the plants, remain the same.

There has been a very good display of camellias through the winter, and some of the large standard plants have flowered profusely. Among those of more recent introduction, which have flowered, we observed, at a late visit, *C. var. Gilesii*, which we have noticed in another page, and *picturata*, something like *eclipsis*. Some large acacias were flowering finely, and presented a superb appearance, with their golden, 'plume-like, blossoms, waving over the surrounding plants. How beautiful are some of the species! *pubescens* is one of the most delicate, and *decurrens* one of the most brilliant of the tribe. If they could be made to produce their flowers freely, before they attain to such a size, what valuable plants they would be for small collections.

One of the most attractive features of the conservatory is the great variety of birds which have been collected together from various sources. Many new species have been added, and the number is now quite large. The places in which they are kept, are a kind of aviaries, in the rear of the area for plants.

The plants are in a very good condition, considering the unsuitableness of the house for growing them: the camellias being the principal objects, the conservatory, at this season, presents the most interesting appearance. A few fine rhododendrons are about flowering, and, when in bloom, will add

much to the beauty of the exhibition. To all our city friends, this collection must afford an excellent opportunity for viewing some of the newest and most choice camellias and other plants.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

New method of forcing Strawberries.—At a meeting of the London Horticultural Society last spring, a Banksia medal was presented to Mr. Robert Errington, gardener to Sir P. de M. Grey Egerton, Bart., M. P., at Oulton Park, in Cheshire, for his fine specimens of forward strawberries. As Mr. Errington's method is different from that of any other cultivator, which we have ever heard, and appears to have been attended with much success, we are induced to copy the same, for the information of our readers.

"The runners I use are obtained from the forced plants of the previous season. For this purpose I reserve all the best pots when they are taken out of the house after gathering the crop, and by sheltering them in frames for a few weeks, so as to preserve and ripen their foliage, they produce both fruit and runners in abundance in September.

"After a few weeks' protection, they are turned out of their pots into rich soil, in the course of the month of May, by which time the growing principle is stopped; and it may be observed, that the circumstance of taking them out of their feeders, or pans, which had become full of their fibres, combined with the drop of temperature they sustain, in their removal from the houses to the cold frame, is sufficient to put them instantly to rest, and bring on an artificial winter, as far as the maturation and rest of the newly organized bud is concerned. The runners are taken from the plants in the autumn, and planted in a reserve bed, as thick as they can stand together, for the winter. I must here digress, to observe that the advantage which the runners of forced plants possess over the common garden runners, is two-fold. In the first place, the runners of the forced plants, being produced later, are smaller, and much less disposed to blossom, consequently, have more of the growing principle in them, and are, in my opinion, more analogous to a seedling; and, secondly, in point of size, for the plant cannot be too small, if it have a leaf and a root. In the beginning of April, I prepare ground for their reception and cultivation. I choose my ground in the lightest and most exposed situation which the kitchen garden affords, in fact, there must be no shade of any kind near them; the ground must also be solid, that is to say, ground which has not been stirred for months; my object being to produce early growth, early rest, and a fibrous surface root. The ground is dressed with the rottenest dung the place affords, well mixed in with a fork, about four inches deep,

(by no means more.) I place the runners in lines, twenty inches apart, and allow eighteen inches between plant and plant, in the row. Nothing now is requisite but to keep them clean through the summer, well watered for a month or so, and to cut away all runners and blossoms as they appear. In the middle of August, by which time they are strong plants, I commence a series of checks, intended to drive the plant into an early and decided rest. A laborer, with a spade, cuts within a foot of the plants all along the row, on both sides. If this does not cause them to flag in a hot sun, the cutting is repeated in a week, and perhaps a third time, cutting nearer the plant each time, until finally within six inches. However, be it understood, the extent of this checking process depends entirely on the character of the summer, and the state of the plant. If a hot, dry summer, perchance they may not require it; but, for early forcing, the plant must be got to rest early in the autumn, and by rest I mean the entire ceasing of the production of young leaves in the heart of the plant, and the browning, or spotting, of all the larger leaves.

"In the early part of September, I pot them in what is called about London, the No. 24. I reduce the ball of earth very liberally, and trim the roots in with a knife. The pots are drained with a mixture of old tan, quite rough, half rotten dung, and coarse sand. The soil I use is composed of three parts of yellow loam sod, almost as adhesive as clay, but mellowed with age, and one part of rich rotten dung, adding a good sprinkling of fine bone-dust. As soon as potted, they are placed behind a north wall, and sprinkled occasionally with water. They remain here about a week or ten days, in fact, until I can ascertain that they are making new roots; they are then removed to a hot gravel walk before a south border, where they remain till the last week in October. While in this situation, they are watered occasionally, but not too freely, just enough to keep them from flagging. In the end of October, they are plunged behind a north wall, completely in the shade, and from this moment I date the commencement of their winter; their large, strong leaves are now of a coppery and mottled brown, and begin to drop down on the pots. In fact, every thing indicates the most perfect maturity of the bud. When I want to commence forcing, I move a portion of them into a slow, moist frame heat, of from 40° to 50°, and I may here observe, that the more gradually they are started the better, but by all means, in a moist warmth. When I perceive the flower stem, I introduce them to the back shelves in the houses, placing roomy feeders or pans under them, half filled with the following compost, viz. three parts rotten horse dung, one part sandy loam, one part old tan in little knobs or lumps, two parts coarse sand; the pots being placed particularly firm and level on this, little now is wanted, but regular watering; the thermometer, however, is by no means allowed to rise above 65° in the day, and 55° at night, until the first bloom opens, except in sunshine, and the floors are kept saturated with moisture, with, at all possible opportunities, abundance of air. As to setting the blossoms, I endeavor to get the house up to 70° artificial heat, from daylight until near noon, by which time I have a perfectly dry atmosphere, and the farina in a most subtle state. I then open the sashes front and back, and obtain a lively circulation of air for an hour or so. I then take all the air away, and, towards three or four o'clock, syringe them overhead, and water the floors and flues for the night. The next part of the process is thinning out the berries when they begin to swell off; my crops

set so abundantly by the above method, that I am compelled to thin away at least one half with the scissors. I leave from fourteen to twenty berries on each pot, and immediately this thinning is completed; I increase my heat to 70° by day, and 60° by night, shutting up the house on sunny days as high as 90°, with heavy syringing, and floors saturated with wet. I use liquid manure from the time the first flower opens, until the fruit turns color, diluting it with one half clean water in a tepid state, observing to use clean water alternately with dung water, as I find by experience, that it is absolutely necessary at all times, or stagnation ensues; and I may here observe that this is the reason why, as I think, many are deceived in their expectations with regard to liquid manure. When my strawberries are ripening, I withhold water almost entirely, more especially for many hours previous to each gathering, observing to give abundance of air by day, and, if possible, a little at night, as on this their flavor most materially depends. When they begin to color, I lower the temperature of the houses, as the slower they ripen the finer the fruit will be, and the richer the flavor, taking care, however, not to starve them.

"Those who have not been accustomed to this mode, may probably be prejudiced at the appearance of so much care and trouble. I can assure them, however, that it is not so troublesome as it appears at first sight; it is only observing the proper times of conducting the different processes, which, if attended to, will infallibly produce abundant crops of unusually large strawberries. Of course, no red spiders or aphides are allowed to rest a day on the plants; one complete fumigating, and a day's sulphuring when the blossoms of the earliest crop are rising, are all the care I take in this respect; and this carries me through the strawberry season." (*Gard. Mag.*)

The plants are grown on the back shelf of two houses, whose respective lengths are thirty feet; each house holds thirty-two pots, making sixty-four in all, and the shelf is close to the roof.

The following is a statement of the produce of the sixty-four pots on the two shelves, viz: "Each pot averaged fourteen strawberries; each shelf contained thirty-two pots. From three to four strawberries averaged an ounce. Thus $32 \times 14 = 448 \div 4 = 112$ oz. the produce of each shelf." The two shelves producing 224 oz., or 14 lbs. of strawberries. At 2s. sterling per ounce, the prices which strawberries bring in Covent Garden Market, is £22 8s., or about \$100.

The weight of a quart of strawberries is probably about one pound. The sixty-four pots would thus give fourteen quarts of strawberries, which, at two dollars per pint, the price, which we doubt not strawberries would command, in April, is sixty-four dollars, or one dollar for the product of every pot. We have no doubt that forced strawberries would command a good sale in our market at the above price, and yield a handsome profit to the cultivator.—*Ed.*]

ART. II. Domestic Notices.

Fruit buds of Peach trees destroyed.—The fruit buds of nearly all my peach trees are destroyed, and where I should have had a thousand baskets of peaches, if the season had been favorable, I shall not have ten.

If any of your correspondents can give the reason how it is that peaches, apricots, &c. are often killed in the flower bud, as mine are, I should be exceedingly pleased to hear them through your pages. Perhaps if we could arrive at the true cause of their destruction, we might apply some remedy. Again, I should be glad to learn how far north and south the flower buds have been killed the present season. I find that my trees, in some situations and exposures, have a great many of the buds uninjured, while, on those in other places, there is not *one* live fruit bud. I notice that in the most elevated and exposed situations they suffer less than in protected places. I trust some of your able correspondents will give us their ideas upon this subject. — *T. Hancock, Burlington, N. J., Feb. 1840.*

ART. III. Retrospective Criticism.

The Indian Chrysanthemum is spoken of, as being forced into an early and premature bloom, and in this condition exhibited before the Paris Horticultural Society, during the months of May and July, (Vol. VI., p. 70.) Justice to an ingenious and excellent florist, well known to every amateur in the vicinity of Boston, demands the right of a previous claim to this discovery; the more especially as the subject was not the slow expanding Indian, but the early autumnal variety of the Chinese chrysanthemum. The Indian chrysanthemum is the most tardy of this group of plants, in producing its bloom. It seems to require a higher temperature than its co-species. Mid-winter usually occurs before its pretty golden or white globular blossoms enliven the green-house. Plants struck late from cuttings, or retarded in the cooler parts of the green-house, we have no doubt might be made to produce fine flowers at a very advanced period beyond their regular time, by having on hand a *corps du reserve* to introduce into the hot-house, or to receive the acceleration of increased heat towards spring.

Something like ten years since, we were most kindly presented with a beautiful plant of Chinese chrysanthemum, we think it was the variety *paper white*, in full and most luxuriant bloom in the month of May. It was one of several, struck late the previous autumn from cuttings, and grown during the winter on a shelf near the glass on the back wall of the green-house. The donor and cultivator was Mr. D. Haggerston, at present at the head of the splendid conservatory and grounds of Mr. J. P. Cushing, Watertown, then, in a course of experiments on the culture of the foreign vine in the open air, at the Vineyard on Bunker Hill, Charlestown. From the perfect success of this interesting experiment, we see no obvious difficulty in flowering the Indian chrysanthemum, and presume that a similar course would produce the same result.

It would be well to add, for the information of some of your readers not familiar with descriptive botany, that the Indian and Chinese chrysanthemums are distinct species. The former is a very small group, viz. the original type with yellow flowers, and its variety with white. The style of growth is peculiar. The foliage is more compact, and of a dark rich green. The height is moderate. The flowers are more unbelled, on stiff peduncles. Each blossom is small, nearly globular, and the contour of inflorescence like the double feverfuge, (*Pyræthrum parthénium* fl. pl.) Being a late bloomer, it is sel-

dom grown, unless by the more curious in plants: the ordinary temperature of the green-house being insufficient to expand its buds. The finest we have ever seen were under the culture of J. W. Russell, superintendent of Mount Auburn. No one who ever saw both kinds, the yellow and white well grown, who would not admire its rare beauty.

Of Chinese chrysanthemums, a descriptive catalogue of those known in England and this country, in the year 1835, has been published in the first volume of this Magazine, (pp. 138, 146.) Since, many new and beautiful American seedlings have been raised by a Mr. Kilvington, of Philadelphia, and offered for sale by Mackenzie & Buchanan, florists of that city. We have seen none of them, but we believe that they are the first plants of the sort ever reared from the seed in this country.

The chrysanthemum, like other florist's flowers, seems to have had its day. Fashion may, perhaps, again introduce it to general notice, and restore it to that rank, which it deservedly holds as the beauty of the declining year.—*Justicia Fiat.*

Information wanted!—The Standing Committee on Flowers of the Massachusetts Horticultural Society awarded, not long since, two of the three prizes offered as premiums by T. Lee, Esq., on native flowers. By referring to the conditions as published in Vol. V., p. 157, "For the best exhibition during the season at their hall, of the native plants of New England, *wherever grown*," &c. what does *wherever grown* signify? If it implies *cultivation*, we fear the distribution of the prizes was unauthorized. He who *grows* a plant, or a plant *grown*, are horticultural terms, implying culture. If this, the technical meaning, was the intention of the gentleman who instituted the prizes, we could point out one, and one only, who has fulfilled the spirit if not the letter of the supposed intention of a measure, calculated "to bring into cultivation 'native plants,' the pride of our woods and meadows—so justly valued abroad, and so long neglected at home."?

ART. IV. Massachusetts Horticultural Society.

Saturday, Feb. 1st, 1840.—Exhibited. Fruits: From S. Downer, several handsome specimens of apples, as follows:—Baldwin, old pearmain, old Nonsuch, Newton pippin, Rhode Island greening, russet, and the Wales, (the latter much resembling the Baldwin in appearance, but a different apple; its origin is unknown.) Also, Catillac, and old Iron pears. From E. M. Richards, fine specimens of the Pomme d'Api or Lady apple, and Glout morceaux, and L'Echasserie pears, the latter excellent.

Feb. 8th.—Exhibited. Fruits: From R. Manning, specimens of Easter Beurré pears. From William Oliver, beautiful specimens of the Echasserie pears. From B. V. French, three kinds of red winter apples, names and origin unknown. From Dr. E. W. Bull, Hartford, Conn., specimens of a large, handsome, red, sweet apple: they were the produce of a natural tree, which yielded, the past year, thirty bushels of apples. Mr. Manning thinks it will prove to be one of the most valuable winter fruits. Dr. Bull has kindly offered to send scions of this apple for distribution among the members of the Society. [We hope our correspondent, when he sends in the scions, will be so kind as to send us some account of the origin of the tree, if it can be easily ascertained.—Ed.]

The standing committee on fruits, and the standing committee on vegetables, have awarded premiums for the year 1839, as follows.

Fruits: The committee on fruits award the following premiums:—

Pears—For the best summer pears, to Mr. Samuel Pond, a premium of	\$5 00
For the best autumn pears, to Mr. Richard Ward, a premium of	5 00
For the best winter pears, to Mr. E. Vose, president of the society, a premium of	5 00
Apples—For the best summer apples, to E. M. Richards, a premium of	5 00
For the best autumn apples, to Mr. J. L. L. F. Warren, a premium of	5 00
For the best winter apples, to Dr. Amos Holbrook, a premium of	5 00
Cherries—For the best cherries, to Mr. E. Vose, a prem. of	5 00
Peaches—For the best peaches, (open culture,) to Mrs. Bigelow, a gratuity of	5 00
For the best peaches, (under glass,) to Mr. J. F. Allen, a gratuity of	5 00
Plums—For the best plums, to Mr. S. R. Johnson, a premium of	5 00
For the next best, to Mr. Samuel Pond, a gratuity of	5 00
For the next best, to Mr. R. Manning, a gratuity of	5 00
Apricots—For the best apricots, to the Hon. John Welles, a premium of	5 00
Nectarines—For the best nectarines, to Mr. Thomas Mason, a premium of	5 00
Quinces—For the best quinces, to Col. M. P. Wilder, a premium of	5 00
Grapes—For the best foreign grapes, grown under glass, to Mr. Otis Johnson, a premium of	10 00
For the best foreign grapes, open culture, to Benjamin Guild, Esq., a premium of	5 00
Gooseberries—For the best desert gooseberries, to Mr. John Hovey, a premium of	5 00
Raspberries—For the best raspberries, to Mr. Thomas Mason, a premium of	5 00
Strawberries—For the best strawberries, to Messrs. Hovey & Co., a premium of	5 00
Currants—For the best currants, to Mr. A. D. Williams, a premium of	2 00
Melons—For the best pair watermelons, to Mr. John Hill, a gratuity of	3 00
For the best muskmelons, to Mr. E. Vose, a prem. of	3 00
For the Committee, <i>E. M. Richards, Chairman.</i>	

Vegetables:—The vegetable committee on premiums, for 1839, report as follows:—

Asparagus—None exhibited.

Beans—Large Lima, two quarts shelled, to J. L. L. F. Warren, a premium of 3 00 |

Earliest and best Dwarf, to J. L. L. F. Warren, a premium of 2 00 |

Brocoli—Earliest and best, four heads, to A. D. Williams, a premium of 3 00 |

Beets—Twelve roots, to A. D. Williams, a premium of 2 00 |

Cabbages—Best six heads, to A. D. Williams, a premium of	2 00
Carrots—Twelve roots to A. D. Williams, a premium of	2 00
Cauliflowers—No premium.	
Cucumbers—Best pair, before first Saturday in July, to J. L. L. F. Warren, a premium of	4 00
Celery—Two roots, no premium.	
Corn—For boiling, no premium.	
Lettuce—Finest six in the season, to John Hovey, a premium of	2 00
Peas—Earliest and best, one peck to R. Howe, a premium of	4 00
Potatoes—None exhibited.	
Onions—None exhibited.	
Rhubarb—Best specimens, to S. Pond, a premium of	3 00
Squashes—Summer, none exhibited.	
Winter, largest and best pair, to J. French, jr. a prem. of	3 00
Tomatoes—Finest specimens, to J. L. L. F. Warren, a premium of	3 00
The committee also award the following premiums and gratuities:—	
To E. H. Derby, Esq., for a fine large squash, a gratuity of	3 00
To S. Blake, for a fine large squash, a gratuity of	3 00
To J. French, Jr., for fine Marrow and Lima squashes, a premium of	3 00
To J. Prince, Esq., for specimens of Brussels sprouts, a premium of	2 00
To C. R. Lowell, Esq., for specimens of egg plants, a gratuity of	2 00
To G. W. Stearns, Esq., for fine specimens of forced cucumbers, a gratuity of	4 00

The committee regret that so little interest has been manifested the past season, in this important part of the Society's labors; but true it is, that during the whole season, there were but few exhibitions of vegetables, and those few were but from a small portion of the members of the Society, who have heretofore been ever ready to exhibit their zeal in promoting its interest.

The committee would notice, with approbation, the five specimens of squashes, of the varieties *marrow*, *crook-neck*, *Lima*, and *Valparaiso*, exhibited by E. H. Derby, J. French, and S. Blake, Esqrs., at the annual exhibition; and they hope to see more of those valuable varieties the coming season.

The *Rohan potatoes*, exhibited by the Hon. John Lowell, were a very superior specimen, and the finest known to have been grown the present season.

The *Brussels sprouts*, by John Prince, Esq., were deserving of particular notice; they were very fine, and it is desirable that this valuable production of the vegetable garden, should be more extensively cultivated.

The *Giant celery*, exhibited by W. L. Rushton, Esq., of New York, deserves, also, marked notice; it was as fine as has ever been exhibited at the Society's rooms.

The *Egg plants*, by C. R. Lowell, Esq., of three varieties, were large, and finely shaped, and uncommonly beautiful specimens. It is desirable that exertions should be made to produce this luxury in more abundance.

The committee cannot leave this report, without earnestly inviting those members, who feel an interest in the important department of

the kitchen garden, to greater exertions the coming season; and especially to forwarding to the exhibitions of the Society, more numerous specimens of vegetables, in order that its labors, devoted to this object, may reflect equal credit upon it, as to the other leading branches of cultivation, which engage its prominent attention. Respectfully submitted.—James L. L. F. Warren, Chairman.

ART. V. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Squashes, per cwt:			
Chenangoes, } per barrel,	1 25	1 50		Winter crook neck,.....	2 50	3 00	
} per bushel,	50	—		Autumnal Marrow,.....	4 00	6 00	
Common, } per barrel, ..	1 00	1 25		Canada crook neck,.....	3 00	3 50	
} per bushel, ..	50	—		West Indias.....	3 00	3 50	
Eastports, } per barrel, ..	3 00	—		Pumpkins, each.....	20	25	
} per bushel, ..	1 25	1 50					
Sweet Potatoes, per bush.	2 00	2 50					
Turnips:							
Common, per bushel,....	37½	50					
Ruta Baga, per bushel,...	37½	50					
Onions:				<i>Fruits.</i>			
White, per bushel,.....	1 00	1 50		Apples, dessert, new :			
Red, per bunch,.....	3	4		Common, } per barrel,...	2 50	3 00	
White, per bunch,.....	2	3		} per bushel,...	1 00	—	
Yellow, per bushel,.....	62	75		Russots, } per barrel,....	3 50	3 75	
Beets, per bushel,.....	50	62½		} per bushel,....	1 50	—	
Carrots, per bushel,.....	50	62½		Baldwins, } per barrel,....	4 00	4 50	
Parsnips, per bushel,....	62½	75		} per bushel,....	1 50	—	
Horseradish, per pound, ..	10	12		N. Y. pippins, } pr barrel,	3 00	3 50	
Radishes, per bunch,.....	12	20		} pr bushel,	1 50	—	
Shallots, per pound,.....	20	—		Greenings, per barrel,...	3 50	4 00	
Garlic, per pound,.....	12	—		Pearmain, per barrel,...	3 00	3 50	
				Sweet, per barrel,.....	3 00	3 50	
<i>Cabbages, Salads, &c.</i>				Lady Apples, per bushel,.	2 00	—	
Cabbages, per dozen:				Dried apples, per pound, ..	8½	9	
Savoy.....	37	50		Pears:			
Drumhead,.....	75	1 00		St. Germain, per doz....	50	1 00	
Red Dutch.....	50	75		Chaumontel, per half peck,	—	—	
Cauliflowers, each,.....	12½	25		Baking, per bushel,.....	2 00	2 50	
Brocoli, each,.....	20	25		Grapes, per pound:			
Lettuce, per head,.....	6	10		Black Hamburgh,.....	—	—	
Tomatoes, per dozen,....	50	75		Malaga,.....	17	20	
Celery, per root:				Cranberries, per bushel,...	3 50	4 00	
Common,.....	6	8		Lemons, per dozen,.....	20	25	
Bailey's Giant,.....	10	12		Oranges, per dozen :			
Spinach, per half peck....	12½	17		Sicily,.....	25	—	
Dandelions, per half peck..	50	—		Havana, (sweet).....	37½	50	
				Pineapples, each,.....	25	37½	
<i>Pot and Sweet Herbs.</i>				Cocoanuts, each,.....	5	6	
Parsley, per half peck,....	50	—		Chestnuts, per bushel,....	4 00	4 50	
Sage, per pound,.....	17	20		Walnuts, per bushel,.....	1 75	2 00	
Marjorum, per bunch,....	6	12		Almonds, (sweet,) per pound,	—	—	
Savory, per bunch,.....	6	12		Filberts, per pound,.....	4	—	
Spearmint, per bunch,....	3	6		Castana,.....	4	—	
				English walnuts, per lb.....	5½	6	

REMARKS.—A mild month, compared with January, has had a most favorable effect upon the market; many articles, of which the

supply was growing short, at the time of our last report, have been brought in more freely, and the stock kept well replenished.

The stock of potatoes, though somewhat reduced at the time of our last report, has been made good by recent arrivals of some eastern cargoes; Long reds are brought in from the vicinity; the warm weather of the past week or ten days, affording a fine opportunity for this object; Eastports are nearly gone, and now have reached their highest rate: Sweet are about gone, only some small and inferior lots remaining. Common Turnips, of good quality, have become firmer, and, generally, a little advancement in price has been asked. White Onions scarce; other sorts remarkably abundant. Radishes, owing to the cold weather of January, did not come forward very fast, but the prospect now is of a great supply. In Cabbages, no alteration; the stock fair and demand good. Cauliflowers nearly gone. Lettuce is not yet large, but is of good quality; it will be abundant soon. Celery very scarce. Spinach plentiful: it is now gathered from the open ground, and the fine weather has brought it forward rapidly. Dandelions of cultivated growth command our quotations, and they sell well. Squashes are mostly gone; for what few that are good remain, from four to six cents are demanded; one small lot of West Indias has arrived.

Apples continue to advance, particularly Baldwins and russetts; the demand appears to be tolerably good, and all sorts are a shade higher; Dried apples sell well at our quotations. The only pear now remaining, is the old baking variety; all eatable kinds are gone. Grapes the same as our last. Cranberries have still further advanced, and there is but a small supply on hand. Arrivals of Sicily and Havana oranges have furnished an abundance. No fine pine-apples in the market. Chestnuts continue scarce and high. Of Walnuts a fair supply and demand.—*M. T.*, Feb. 26, 1840.

ART. VI. Obituary Notice.

Died, in Philadelphia, on the 27th of January, 1840, *Francis S. Wiggins*, Esq., late editor of the *Farmer's Cabinet*, and more recently of the *American Farmer's Companion*, (noticed at p. 66.) in the 40th year of his age. The following notice of his death we gather from the *American Farmer's Companion*. "Mr. Wiggins had, for several years, struggled against a flattering but fatal disease, and, during this time, continued to labor with a zeal and perseverance, which often astonished those who witnessed his exertions. He edited the "*Mechanics' Register*," "*Farmers' Cabinet*," "*Ladies' Garland*," and "*Philadelphia Reporter*," besides preparing a valuable agricultural work, which is now in course of publication, and from which it is hoped his bereaved widow will derive some emolument. He was many years engaged in compiling a Chronology, which, as far as completed, it is presumed, will be the most perfect work of the kind in the English language. Mr. Wiggins's station as editor, enabled him to procure a great variety of periodicals, from which he was in the constant habit of selecting articles of permanent utility, which were classified and preserved in scrap books, thus condensing a mass of information on various subjects, which afford a most valuable reference."—(*American Farmer's Companion*.)

Thus, within the short space of three years, the agricultural community have been called to mourn the loss of three of its most use-

ful members, T. G. Fessenden, Esq., of Boston, Judge Buel, of Albany, and Mr. Wiggins, of Philadelphia, each of them editors of journals devoted to agriculture. Mr. Wiggins was a good writer, and his journal evinced great labor and devotion to the subject on which it was designed to treat.

HORTICULTURAL MEMORANDA

FOR MARCH.

Grape vines will now be pushing their buds in the green-house, and care should be taken that they are not allowed, if fruit bearing vines, to do so unevenly: timely precaution may save much loss of fruit. Tie up the shoots carefully, and if the borders are enriched, or forked over, let it be well done.

Peach trees in pots may now be brought into the green-house, or, towards the latter part of the month, may be forwarded by placing them in the sun in the open air, and protecting them at night, if there is danger of frost.

Fruit trees may be removed after the 20th, if the weather is mild and frost well out.

Scions should now be cut, if wanted.

Raspberry bushes and grape vines should be uncovered after the 20th.

Gooseberry beds should be dug and manured the earliest opportunity, before they commence growing.

FLOWER DEPARTMENT.

Camellias will now commence making their new wood; water abundantly, and if any need potting, let it be done immediately. Shade the plants from the hot sun, and syringe the plants at least twice a week.

Azaleas will now be flowering; give them plenty of water.

Dahlias, already started in pots, had better be shifted into the next size.

Heath and Epacris cuttings may be now put in with success. See Mr. Towne's article, (V. p. 376.)

Cactuses which show their flower buds prominently, should be duly watered, and they will soon expand their flowers.

Geraniums will need care; fumigate the house if the aphid trouble the plants.

Gladiolus floribundus, natalensis, &c. may now be potted for early flowering.

Trevirana coccinea.—Plants, potted last month, should be shifted into the next size.

Verbenas will need repotting.

Annual seeds, such as coxcombs, balsams, &c. may be sown in hot-beds for early flowering. If the weather is mild, and the garden in good condition, clarkias, larkspurs, &c. should be sown the last part of March in the open ground.

Hyacinth and tulip beds should be partially uncovered, and if the weather is very pleasant, wholly so.

Herbaceous plants, protected by a covering, should have it removed the last part of the month.

VEGETABLE DEPARTMENT.

Cucumber plants will need some hilling up; keep up a good heat by linings, and be careful to set the fruit if any shows.

Celery, egg plant, and tomato seeds may be sown this month for an early crop.

THE MAGAZINE

OF

HORTICULTURE.

APRIL, 1840.

ORIGINAL COMMUNICATIONS.

- ART. I. *Pomological Notices; or, Notices of new and superior varieties of fruits, worthy of general cultivation.***
1. *Notices of several Pears and other fruits.* By J. M. Ives, Salem, Mass. 2. *Account of a new seedling Peach.* By T. HANCOCK, Burlington, N. J. 3. *Notices of several new Fruits.* By the EDITOR.

I OBSERVED, in a late number of your excellent Magazine of Horticulture, (p. 43,) an article enumerating some of the more recently introduced fruits; among the new pears was one called the Michaux, which you observed in my garden, upon the tree, during the past fall, and noticed, at that time, in an article upon the gardens in this vicinity. As you have expressed a desire that I would give you some account of this new variety, I cheerfully comply with your wishes; and while doing so, I have thought that it might not be altogether uninteresting to those who are forming a collection of fruits, to take off some hasty notes, which I have been in the habit of making upon an interlined copy of Manning's *Book of Fruits*: for in making up a collection of fruits, particularly of pears, many things are to be considered; such, for instance, as the uniform and general character of the fruit, from year to year—its fruitfulness—the kind of stock—and the soil and exposure of the various kinds.

It is better, I am convinced, as says one, "to limit the varieties of fruit, for certainly the rage for multiplying them, and of having a numerous collection, has too much prevailed of

late. It were better to be contented with a few good kinds, that produce well in most seasons, than to plant many sorts (even of those reckoned the finest) for the sake of variety, of which a crop is obtained, perhaps once in three or seven years." As the following is but the experience of the two last seasons, and my soil is of rather a dry, sandy loam, with a substratum of clay, although pretty well enriched with mucle-bed and leach ashes, it cannot be expected but that allowances should be made for these circumstances.

PEARS.—The following are the kinds which have fruited:—

Petit Muscat.—Ripened in 1838, from 26th to 30th July. Spicy.

Madeleine.—In dry, sandy loam; fruit small and poor.

Bloodgood.—Fruited finely on small trees; color cinnamon russet. Received from Prince & Sons, of Flushing, L. I., for the early *Beurré*. A fine flavored fruit.

Bartlett.—Occasionally uncertain; fruit on some trees, in 1838, worthless.

Julienne.—In 1838, a small crop, and good. In 1839, large crop, and worthless.

Dearborn's Seedling.—More delicate, thin skinned, and higher flavored, than any other early pear; fruit good size upon quince stock.

Cushing.—Small bearer in 1838 and '39.

Green Pear of Yair.—Juicy, slightly astringent; second rate.

Johonnot.—High flavored; in eating but a few days; signs of cracking.

Andrews.—Good fruit, constant bearer; makes long shoots in rich land; fruit apt to blow off.

Belle Lucrative.—This fine fruit, upon two trees, all blew off in 1838 and '39, the stem being long and slender.

Long Green.—This fine old variety shows no symptoms of blight, as yet.

Harvard.—Uncertain; exceedingly apt to rot at the core, and differing greatly in quality from year to year.

Raymond.—This fine fruit has become not worthy of cultivation upon standards. Tree feeble in its growth; bad bearer; shows evidence of decay.

Beurré Bosc.—Received from France, under the name of Bosc. This was decidedly the best fruit of 1838, with me: it was grown on the quince.

Cabot.—This fruit, resembling the old brown *Beurré* in form and quality, cracked badly in 1838.

Princess of Orange.—Not a good bearer upon small trees; fruit second rate.

Frederic of Wurtemberg.—Large and beautiful; the finest market fall pear in my collection.

Napoleon.—Requires a long season to mature. Ripened in 1838, but not in 1839.

Bleecker's Meadow.—Good bearer; fine fruit; holds upon the tree well; worthy of extensive cultivation.

Beurré Diel.—Fine quality, but apt to crack.

Passe Colmar.—Seldom matures its fruit upon standards, but fine and a great bearer upon the quince.

Lewis.—This fruit was small in 1838 and '39, and but second rate.

Easter Beurré.—This pear requires a long season to mature its fruit; finer upon dwarfs or espaliers.

Michaux.—This new Flemish pear, fruited in 1839. A specimen, which dropped from the tree, was juicy and high flavored, resembling the Napoleon; the form oblong, thick at the crown and stock; ripens late in the fall.

For the information of those who are in the habit of purchasing French trees, or importing trees from the French nurserymen, I would note the following, which have proved synonyms in my collection:—*Beurré d'Arenburg* has proved to be the *Glout morceau*; *Poire melon*, the *Beurré Diel*; *Bergamotte d'Été*, the *Summer Frankreal*; *Poire d'Ananas*, the *St. Ghislain*; *Beurré Penticoste*, and *Doyenne d'hiver*, the *Easter Beurré*; *Valleé*, and *St. Sampson*, the *Jargonelle*; *Citron des Carmes*, the *Prince's Sugar*; *Beurré d'Anjou*, the brown *Beurré*. Many such errors occur among the nurserymen of this country, and the only way to prevent such confusion is, to adopt Mr. Manning's practice of cutting buds or grafts, *only* from such trees as have produced fruit, and are proved to be true.

PLUMS.—The following plums are briefly noticed.

Prince's Imperial Gage.—This and the *Jenkinson's Imperial*, which I received from the nursery of *Buel & Wilson*, *Albany*, are identical.

Cruger's Seedling.—This showy scarlet plum, of the size of the old green *Gage*, and a great bearer, was originated by a Mr. *Cruger*, near *Newburgh*, *N. Y.* Flesh yellow, sweet, and of a good flavor, ripening from September to October. The fruit is less liable to rot upon the tree than any other variety in my collection.

White Sweet Damson.—This seedling plum is a great bearer, ripening, in succession, from the first of September to the last of October, and although not of high flavor, is still sweet, and its bearing early renders it worthy of cultivation. Originated somewhere in *Essex county*.

CHERRIES.—*White Bigarreau.*—This, although a first-rate fruit, is exceedingly liable to rot upon the tree, particularly if exposed to rain at the time of ripening.

The Black Tartarian is the best of all the varieties I have, as yet, fruited.

Manning's Fine Red.—A fine new seedling cherry, raised from the stone of the white Bigarreau, which I have called Manning's Fine Red. The tree is remarkable for its large leaves and beautiful growth; the fruit is of a fine sprightly flavor; flesh firm; has borne for two years past well; not subject to rot at the time of ripening, which is a great objection to its parent, the Bigarreau, as also to many other fine varieties. It ripens in July, about a fortnight earlier than the black Tartarian, remaining upon the tree in a sound state for some time. I consider it a very desirable sort for the market, particularly as from its large foliage, or some other cause, I have found it less liable to injury from the birds.

APPLES.—*Red Doctor.*—This fruit was small and indifferent; bad bearer.

PEACHES.—*Heath Clingstone Peach.*—This fruit and the Lemon Clingstone rarely ripens in the open air with us.—*J. M. Ives, Salem, Feb., 1840.*

[We are gratified in being able to lay before our readers the opinions of Mr. Ives, in relation to the fruits he has cultivated. They prove, conclusively, that, in peculiar soils and under peculiar circumstances, the habits and general character of many varieties of fruits essentially vary. We hope that other cultivators, who have had the same experience, will give us the results of their experiments. A comparison of their notes will lead to results, which will be of much importance to all cultivators of fruits. Mr. Ives will receive our thanks for the above, and we trust that he will continue to give us any information which may be useful to those who are forming collections of fruits.—*Ed.*]

New Seedling Peach.—We have a very fine new seedling peach here: the tree has produced fruit the past season. The peach is rather large, in shape like the Morris white, but does not ripen until about the 25th of September. It is a free stone, and the highest flavored peach I have tasted at that season. It has occasionally a faint blush next the sun.

Apples.—I find, in looking over some of the fruit catalogues of the nurserymen in the vicinity of Boston, that I have several varieties of apples, not included in their collections, or, if included, under names which are not known here. As

a list of them may be interesting to some cultivators, I give you the following:—Sheepnose or Bullock pippin, white Seek-no-further, Maiden's Blush, Cider apple, Monmouth or Red-cheek pippin, Roman Stem, Kaighn's Spitzemberg, Wine-sap, Tewkesbury, Winter Blush, and Hagloe crab. All these are equal to any apples, in cultivation, that I am acquainted with. Should I have apples of the above kinds, and perhaps some other varieties, the coming summer and fall, I intend sending you some specimens for inspection.—*T. Hancock, Burlington, N. J., Feb. 1840.*

We have already enumerated several varieties of pears and plums, which we have observed noticed by pomological authors, and others, in foreign Magazines. We now annex a few notices of some other fruits, which we have seen mentioned in the reports of the London Horticultural Society, in the *Gardener's Magazine*, or by Mr. Thompson, in the same work.

Buttner's October Morello Cherry.—Exhibited from the garden of the London Horticultural Society. Mr. Thompson remarks, that, in addition to all the good qualities of the variety after which it is named, it bears abundantly as a standard, on which it will hang several weeks later than the Morello.

The late Duke Cherry is recommended very highly by Mr. Thompson, as being a most valuable late variety.

The Duchess of Oldenburg apple is mentioned as a handsome autumnal variety, covered, like a plum, with a white bloom.

The Sweeney Nonpareil apple.—Specimens of this variety were exhibited as late as June 5th, in excellent preservation, and quite acid enough for kitchen use. It is considered, that its claim, as one of the longest keepers, is fully proved.

New Seedling Strawberries.—Mr. Myatt, the grower of that fine strawberry, Myatt's seedling pine, has produced three more seedlings, which he presented for exhibition before the London Horticultural Society last year. No remark is made about their merit, but we presume they must be at least equal to his new pine. We shall notice them again, if we find any account of their character.

Cannon Hall Muscat grape.—This is the name of a new variety, which is highly esteemed by English cultivators. At a meeting of the London Horticultural Society, last season, a noble bunch was presented for exhibition, and the specimen shown "fully established the claim of this valuable variety, to be placed on a level, in point of excellence, with the Muscat

of Alexandria." In the opinion of Mr. Breese, who raised the specimen, it even excels that variety, as it is earlier, and has but one stone in a berry. At the duke of Devonshire's, at Chatsworth, Mr. Paxton has one vinery completely filled with this favorite variety. It is figured in the *Transactions of the Society*, Vol. I., New Series, p. 169, fig. 5.

Mr. Money's Seedling Grapes, of which considerable has been said, and which have been recommended to cultivators as superior varieties, are stated, by a writer in the *Gardener's Magazine*, who has examined them carefully, to be merely synonymes of old kinds, or, if not synonymes, so nearly resembling some old varieties, as to render them scarcely worth being kept distinct. The Muscat Eshcollata appears to be nothing more than the white Muscat of Alexandria. The only perceptible difference between vines of the two kinds, growing in the same house, was a slightly deeper shade of yellow; supposed to be the result of accident, and not a permanent character: the fruit, foliage, and wood, perfectly agree. The Eshcollata superba appears to resemble a kind known as the black Raisin, and, possibly, it may prove identical with the red Muscadel. Money's West's St. Peter's is the same as one sold by the late Mr. Money as the Raisin des Carmes. It is a good variety, worthy of growth, the berries being large and thin skinned. All these grapes of Mr. Money's have, we believe, been introduced into some of the amateur gardens around Boston, and we have deemed this information as worthy of record, in order that those who possess them may ascertain for themselves, whether the remarks of the writer, who appears to be well acquainted with grapes, are correct. Neither of Mr. Money's seedlings had been proved in the London Horticultural Society's garden, when their last *Catalogue* was published.

There seems to be much confusion in the nomenclature of grapes, and among the great number of varieties cultivated in the numerous graperies and gardens around Boston, under different names, there appears to be but a limited number of distinct sorts. The black Hamburg, so generally grown and esteemed, appears to differ greatly in different collections: last season, at Mr. Cushing's, Belmont Place, Mr. Haggerston showed us some vines, which produced enormously large clusters and large berries, while others in the same house, under precisely the same treatment, and possessing the same advantages for growth, &c., appeared quite unlike, from the smaller clusters and smaller berries. We have seen the same difference in other collections, not only in the black Hamburg,

but in other varieties. Such confusion is extremely perplexing to those who are just planting out vines, and who wish to possess only the most valuable kinds, and are anxious to preserve them true to the name. The variety may possess a resemblance, and may be a good grape, but after three or four years' labor, to find one's expectations not realized, is a disappointment most severely felt. We are in hopes, at some future time, should we have the opportunity to continue our efforts to disseminate information, to make some attempts to reduce the numerous varieties to something like a correct nomenclature, and by collecting all the synonymes, remove the cause of such repeated disappointments as now occur. The grape is now so extensively grown, that it seems important that the most excellent varieties of this delicious fruit should be readily known, and readily procured, without subjecting the cultivator to repeated trouble and disappointment.

ART. II. *Descriptive Notice of three new Verbenas.*
By A PHILADELPHIA AMATEUR.

THE following notice of three new verbenas, seedlings, raised by Mrs. Hibbert, corner of Thirteenth and Lombard streets, Philadelphia, may probably be worthy a situation in your Magazine. They are plants of the last summer's growth, and now flowering for the first time, with the exception of *Verbena Pépperi*, which bloomed in the last autumn.

1. *Verbena Pépperi* is a free bloomer, erect habit, and vigorous growth; foliage resembling somewhat the incisa, but larger. The corymbs are large, and the blossom of a crimson maroon, shaded with purple, entirely distinct from any other variety, and one of the finest in cultivation. Named in honor of George Pepper, Esq., whose devoted attention to the science of horticulture, has long been the admiration of the trade and amateurs, and whose well conducted green-houses are an ornament and an honor to our city.

2. *Verbena Hirstii*.—A plant of vigorous growth, and erect habit. The corymbs large and persistent, of a rich, clear, rosy purple. The flower, in size, larger than incisa, which it slightly resembles in general appearance; an entirely

distinct variety. Named in honor of Henry B. Hirst, Esq., an enterprising horticulturist and seedsman, of our city.

3. *Verbena ignéscens*.—An entirely distinct and superb variety. The foliage small, but the plant of erect growth and standing habit. The flower very large, of the most brilliant, glittering scarlet, and the corymb very full and persistent; twice as brilliant as the *chamædrifolia*, which it resembles in appearance, and much larger than the *Tweediana grandiflora*: as yet, I have seen nothing to equal it.

A PHILADELPHIA AMATEUR.

Philadelphia, Feb. 1840.

ART. III. *On the cultivation of Annual Flowers; with a description of some of the more recently introduced species and varieties, and a list of the most beautiful and desirable kinds for cultivation.* By the EDITOR.

IN our first volume we have offered several articles upon the cultivation of some of the more choice garden annuals; and in our subsequent volumes we have incidentally noticed many of those more recently introduced into our collections; our Floricultural Notices, which have been given, from time to time, since that period, have embraced most, if not all, the new species and varieties worthy of a place in the garden. These notices, however, though often accompanied with brief hints upon their growth and treatment, have, with many of our readers, been overlooked, (and there are many who have never seen them,) under that head, and have not received that attention which they, probably, would, if they had been made the subject of an article by themselves.

The appearance of that beautiful work, Mrs. Loudon's *Ladies' Flower Garden of Ornamental Annuals*, has called our attention to the subject: we had intended to continue the series of articles above alluded to, which we commenced five years since, describing all the new annuals, and their cultivation, from our own experience, from year to year; but other and various subjects have occupied our attention, and if we have not done that justice to this delightful class of plants, which they richly deserve, it has not been because we were insensible to their claims upon our admiration, but rather that objects upon which information has been more immediately

called for, has prevented us from entering at length upon their cultivation.

Ornamental annuals, though slightly esteemed by some cultivators, who raise them as inferior objects, too ephemeral to attract their solicitude and attention, and, consequently, consign them at once to the province of the florist, are, nevertheless, a more interesting and truly valuable class of plants than many others, which are looked upon with great admiration, and sought after at high cost. When it is taken into consideration how cheaply a few seeds are purchased—how easily the plants are cultivated—how much gratification and enjoyment they afford in the short space of their existence, (scarcely six months,) and of the great amount of beauty to be derived from a very limited garden,—it cannot be denied that they deserve an equal share of attention with other plants, and especially with those which need protection and care during our severe winters. The lover of camellias, roses, and similar showy and brilliant tribes, often affects disdain at the idea of cultivating annuals; but if he possesses a garden, in addition to a green-house, and is desirous of rendering it interesting and attractive in the summer season, let him discard from it all annuals, and if its barren appearance does not convince him of the important place they occupy in the floral world, nothing we can advance in their favor will alter his opinion.

Within a few years, many great additions have been made to our collections, both by the process of hybridization and production of new varieties from seed, and the efforts of those lamented botanists, Douglas and Drummond. To the indefatigable efforts of these collectors we are indebted for a greater share of the fine annuals which ornament our gardens. No lover of these plants can look upon the elegant clarkias, the azure clintonia, the golden chryseis, or the lustrous bartonia, without calling to mind the devoted labors and melancholy death of the unfortunate Douglas; and as his eye glances over the flower border, and falls upon the brilliant and varied coloring of that most exquisitely lovely of all annuals, the *Phlox Drummondii*,—the last plant sent to England, previous to the discoverer's death,—a memento of the lamented Drummond will be before him.

From South America many fine additions have been made, and the beautiful schizanthuses, the showy petunias, and pretty verbenas, attest the success which has attended the exertions of Mr. Tweedie. New Holland and the Cape of Good Hope have also contributed many fine species; and, lastly, hybridization has effected great changes in the forms and features of

many of our older and familiar companions: the same efforts continued, are destined, at some future day, to enhance the splendor of the flower border to such a degree, that even the green-house, which may not be unaptly termed our winter garden, filled with exotics, the especial favorites of the amateur, will scarcely be able to bear the palm from the ornamental flower garden.

The following descriptions embrace only such species or varieties as are but little known, and several of which have not, as yet, been cultivated in but few amateur collections, and for the first time the past summer. All of them are desirable and beautiful plants, but some are far more beautiful than the others. It will be our object to notice their comparative claims to cultivation. Some kinds may have flowers, whose individual beauty may not be great, but, either by their number collectively, the length of time which they are displayed, or the habit of the plant, they deserve general growth; others may be remarkable for the splendor of a single bloom, while the whole plant may possess but little elegance. Some, again, may be desirable for particular purposes, for planting in groups or patches, or for their stateliness as single objects in the flower border; while others, from some peculiarity of color, uniqueness of form, delightful odor, or their elegance in the bouquet, have equal claims to our attention. Having cultivated all which we now describe, we shall endeavor to make our descriptions familiar to every reader.

Nigélla hispánica, the large Spanish nigella.—The common *Nigélla damascéna*, or Love in a Mist, is well known, and has, for a long period, been a favorite in all gardens. The present species, however, so far surpasses it in beauty, that it seems scarcely worthy of a place by its side. The *N. hispánica* was introduced into England, from Spain, as long since as the time of Parkinson (1629,) but, notwithstanding over two centuries have passed away, it has never become common in British gardens. We first cultivated it about four years since, but, as it does not seed freely, we lost it the following year; two years ago we imported the seed again, and have since been careful not to lose it. The flower is large and showy, of a deep, brilliant blue, with the carpels, which are black, rising in a column from the centre. The flowers contrast boldly with the delicate foliage, and a patch of plants is a striking object in the border. It grows about a foot and a half high, and of a compact habit.

In the cultivation of the *N. hispánica* the soil should be rich and light, and the seeds should be sown where the plants are

to flower, as they do not, like the larkspur, poppy, &c. bear transplanting well. It is a hardy annual, and the seeds may be sown in the open ground, from the 1st to the 20th of May, according to the favorableness of the season. The plants should stand about six inches apart. It commences flowering in July, and continues till frost.

Nigella ndna, the dwarf nigella.—A pretty dwarf plant, with flowers somewhat like the *N. damascena*. It is not much cultivated, but in large collections, where there is plenty of room, it will be an agreeable object. Culture the same as for the *N. damascena*.

Platystemon californicum, the Californian platystemon.—A low spreading plant, with yellow flowers about an inch and a half in diameter, composed of six petals, and slightly fragrant. It was introduced from California, in 1832, by Douglas.

It is a hardy species, and in large collections is well adapted for planting in large patches. In small gardens it will have to give way to other and more showy plants. The plants should be well thinned out, to allow the branches to extend themselves, and the soil should be moderately light and rich.

Nolana atriplicifolia, the atriplex-leaved nolana.—Few annuals that have been added to our collections can boast of as much beauty as the *Nolana atriplicifolia*. We first cultivated it three years ago, and at that time we alluded to its showy appearance, (Vol. III., p. 302.) It has large flowers, two inches in diameter, shaped like a convolvulus—the edge deeply bordered with blue, the throat a fine yellow, and between this and the blue a band of white—the three colors being quite distinct. The flowers are produced abundantly, and very much resemble the *Convolvulus tricolor*, as we have before remarked in the page just alluded to; but the exquisite feathering of the throat of the corolla, gives it a higher rank in the scale of beauty. The leaves are thick and fleshy, reclining upon the ground, and form a rich base for its splendid blossoms. It is a native of Peru, and was introduced in 1834.

Its cultivation is simple: a moderately rich, light soil seems to suit it well, and the seeds may be planted about the middle of May; or if wanted for early flowering, the plants may be brought forward in a hot-bed and transplanted. It will flower the whole season. This nolana is well adapted for pot cultivation, for the green-house or parlor, and plants have flowered all winter in the collection of T. Lee, Esq., who succeeds admirably in his treatment of this and other annuals, which we shall notice, when grown in this manner; the procumbent stems

and fleshy leaves depending over the rim of the pot, covered with the tricolored tints of its broad corols, have a most showy appearance.

Nemóphila atomària, speckled nemophila.—We have, in a previous volume, (IV., p. 329,) noticed the fine *N. insignis*; *N. atomària*, though not equalling that species, is, notwithstanding, an exceedingly pretty plant; the flowers are not as large as the *insignis*, but they are produced in equal abundance, and are white, covered all over with brownish colored dots. For pot cultivation it is a fit companion to the *N. insignis*, and by bringing the plants closer to the eye, the beauty of the species is much enhanced. Noticed in our Vol. III., p. 225.

It requires the same culture as the *N. insignis*, viz:—a tolerably moist, loamy soil, in a situation not wholly exposed to the sun. The seeds may be sown in a hot-bed, and forwarded, or they may be planted in the open border in May.

Oxyùra chrysanthemoides, the chrysanthemum-like oxyura.—A new and pretty plant, with yellow flowers; somewhat resembling the annual chrysanthemum, but much more delicate and interesting. It grows about a foot high, and blooms freely from July to October.

The seeds may be sown in the open ground, in May, and afterwards transplanted, if necessary, or they may be forwarded in pots in a hot-bed; any good soil is suitable for the plants. It is a native of California, and was sent to England by Douglas, in 1835.

Dracòpis amplexicaúlis, the stem-clasping dracopis.—This is the *Rudbéckia amplexicaúlis* of some authors, and has been noticed in our pages (Vol. III., p. 451,) under that name. It is a pretty annual, growing about a foot high, with yellow flowers, about the size of a coreopsis. It is a free bloomer, of erect habit, and is an agreeable ornament of the garden. It was introduced to Britain, in 1793, from Louisiana, but was lost again until 1835, when it was re-introduced by Mr. Drummond, and sent by him from New Orleans.

Of the earliest cultivation: sow the seeds early in May, in any good soil, and thin out the plants or transplant them when young. They will flower freely from June to October. We have grown this three years.

Calliòpis Drummondii, Mr. Drummond's coreopsis.—Quite new and very beautiful. It grows about a foot high, producing large, almost pure yellow flowers, and remains in bloom to November. We have spoken of it in our last volume, (V., p. 289,) as the *Coreòpsis diversifolia*, and consider it as one of the most ornamental species of the genus. The

plants are dwarf and bushy, standing erect, and the flowers elevated above the foliage, on long stems, from their great abundance, make a brilliant show. It was found by Mr. Drummond in Texas, growing in great quantities with other species, and was sent to England in 1835. It seeds freely, and, since then, has found its place in many choice collections.

Its cultivation is similar to the old and familiar *C. tinctoria*. The seeds may be grown in beds in the border, in May, and the plants will flower from June to November.

Calandrinia discolor, the two-colored calandrinia.—All the calandrinias are pretty plants, but the present species far excels the others: the flowers are about the size of the chryseis, of a rich purple tint, with brilliant yellow stamens, forming a rich contrast. The foliage is thick and fleshy, of a greyish green on the surface, and pale pink underneath, from whence its name. The plants throw up a long stem, from eighteen inches to two feet high, terminated with drooping racemes of flowers. It is supposed to be a native of Chili. Seeds were first received by the London Horticultural Society, from the Berlin Botanic Garden, in 1835.

The seeds may be sown in pots, in the hot-bed, or they may be treated as hardy annuals, and sown in the open ground, (see Vol. II., p. 27.) The soil should be light and rather sandy, without manure, as the plants in a rich soil grow too fast, and have less flowers. A sunny situation should also be chosen, as it is only when the plants are exposed to the full beams of the sun, that they wholly expand their splendid blossoms.

Calandrinia grandiflora, the great flowering calandrinia—is similar, in general appearance, to the discolor, but the flowers are not more than half the size, and of a pale purple. It is cultivated in the same manner.

Calandrinia speciosa, the showy calandrinia.—A dwarf, procumbent species, growing four or five inches high, with small, bright crimson flowers, appearing in great profusion. It is well suited to planting in patches, and a bed three or four feet in diameter presents a brilliant show, beneath the gleam of a bright sun. The same soil and situation should be chosen as for the other species, and the seeds may be sown in May, where the plants are to remain to flower.

Lasthenia californica, the Californian lasthenia.—A pretty little annual, with yellow flowers, about the size of a calliopsis. In a large collection it will be a desirable plant. The seeds should be sown in May, in a good soil, and the plants thinned out to the distance of six inches apart, or transplanted into the border. It is noticed in Vol. II., p. 177.

Lasthènia glabràta.—A species very much resembling the *L. californica*, but with larger flowers, and rather more showy. Cultivated in the same manner.

Hèlènium Douglassii, Mr. Douglas's helenium.—A new annual, which we cultivated for the first time last season. It grows about a foot high; the flowers are yellow, about the size of the calliopsis. Our seeds were sown in a pot in the hot-bed, and the plants set out in the border; but we presume it is a hardy annual, and they may be sown in the open ground in May. It will flower in any good soil.

Bartonia aúrea, the golden bartonia.—This is decidedly one of the greatest acquisitions which has been made to our collections for some time. The bartonia grows about two feet high, considerably branched, each shoot terminated with several flowers. We have already given a description of it, (Vol. II., p. 219,) but, as it is so fine a plant, we have annexed an



engraving, (fig. 4,) in order to convey a better idea of the flowers, which are of a deep golden yellow, and about the size of the chryseis, the petals having a metallic lustre, which renders the plant superbly brilliant under the rays of a bright sun. The foliage is of a greyish green, pubescent, and the branches are very numerous. It was found by Mr. Douglas, in California, and sent to England in 1831.

The plants should be planted in a light rich soil, in a situation not too wet, as they are liable to damp off at the root; neither should the plants be too much exposed to the wind, as the branches are brittle, and easily break. The seeds may be sown in a pot and forwarded, or they may be planted in the open border in May. We have a plant now in bloom in the green-house: a seed accidentally fell into a pot with several

other plants, the past fall, and it is now expanding its golden blossoms in profusion. We shall turn it out into the border in May, where it will, undoubtedly, flower all summer.

Phlox Drummondii.—In our IV., p. 323, we noticed this lovely plant, and gave our method of growing the plants in pots, the only way we had then tried it; last season we cultivated it as a half hardy annual, and the plants flowered profusely all summer, and ripened seed. We remarked, that as the plants were propagated by cuttings, and as the seeds were rarely ripened, it was of little consequence whether any were saved or not; but our last year's experience convinces us, that seedling plants are far preferable to cuttings; and though cuttings may be resorted to for perpetuating a new variety, the plants raised in that manner will not compare with those grown from seed. Every body should possess this.

Leptosiphon androsæceus and *densiflorus*.—In our IV., p. 329, we have noticed these fine plants and their cultivation; we now allude to them again, to notice a plan of cultivating annuals, particularly Californian ones, which we find detailed in Mrs. Loudon's beautiful work before alluded to. We have practised the same method ourselves, many years, with a variety of plants, though it never occurred to us to notice it in our pages. Having for some time planted large beds of different kinds, on purpose for the seed, we often find, in the spring, numerous seedlings just above the ground; these are generally taken up carefully with the spade, and set aside until the beds are dug, when they are replaced or set out in the border.

The writer remarks, that a good method of cultivating the Californian annuals is, to select some out of the way place in the garden; choosing a hard path, if convenient: on this about an inch of good soil is spread, and the seeds are planted on the same in the fall. Early in the spring they will come up strong, and will bloom in May in much greater perfection than those sown in the spring. From this bed of plants the border is supplied by taking a spade, and removing a patch about eight inches square to the situation selected. They will not receive any check in this manner, but bloom as well, and even better, than if they had not been removed.

It is well known that many annuals flower much better if planted in the fall than in the spring; but in small gardens, sowing in the flower border is so inconvenient, and makes so much extra labor, that it is not attempted; if the seeds are planted in the fall, when the borders are dressed in May, they cannot be neatly done if, at every few feet, there is a patch of seedling plants: the soil which, during winter, has become rough and uneven,

communicates a slovenly appearance to the whole border; but if the seeds are planted as before named, after the borders are dug, patches of seedlings may then be transplanted into them, and the neatness of the beds or borders retained. We have grown candytufts, coreopsis, chryseis, silenes, petunias, and many other plants, in this manner, and can recommend it as an excellent method. The season is not so late, but what this may be now done. If self sown plants appear, remove them till the beds are dug, and then carefully replace them, and the operation is finished.

Clintonia elegans, the elegant clintonia.—A delicate little spreading plant, growing about four inches high, with fine blue flowers, with a white eye. It somewhat resembles the *Lobelia grácilis*. It is a native of California, and was introduced by Douglas in 1827. So much has this little plant been admired, that Dr. Lindley has described it as forming, when in full flower, “a carpet of silver and blue,” so brilliant are the flowers, reposing upon the small deep green foliage of the plant. In cultivation it requires a light, rich soil, and the plants should not stand too near together. The seeds may be sown in April, in a pot, or in May in the open ground. It is a fine plant for pot cultivation, as its branches hang over the rim of the pot, and with their numerous blue flowers present a rich display. We have cultivated it in this manner, and Mr. Haggerston, at Mr. Cushing’s, has now several pots of it standing on the front shelf, in the green-house, its azure flowers contrasting beautifully with the scarlet clusters of the verbena.

Clintonia pulchella, the pretty clintonia.—Of the same habit and general appearance of *C. elegans*, but with larger and more brilliant flowers: the blue is of a deeper shade, and the white eye more distinct and showy. It will probably, in a few years, when it shall become as well known as the *élegans*, take its place in collections. It is a native of California, and was introduced by Douglas in 1832, but it is so shy a seeder, that it has just found its way into the seedsmen’s hands. It requires the same treatment as the *C. elegans*. The habit of the plant is more robust, and, like the former, it is well adapted to pot cultivation.

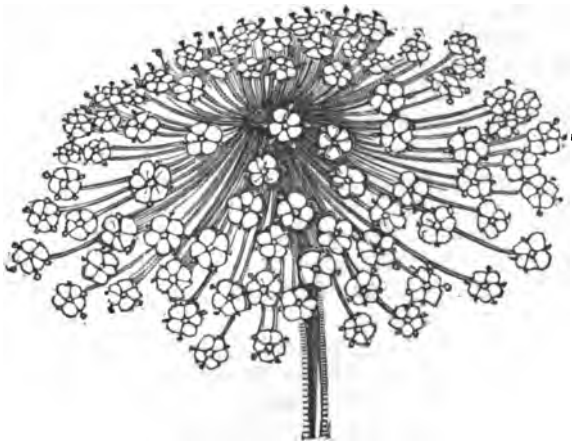
Rodanthe Manglésii, Mr. Mangles’s rodanthe.—Noticed in our Vol. III., p. 177. We first cultivated this plant last season. It is a beautiful annual, growing about a foot high, of slender habit, with rose-colored flowers, appearing in terminal panicles, and very freely produced. It is a native of New Holland. The seeds are small, and ours were planted in a pot, and placed in a hot-bed, in which the heat was nearly ex-

hausted. They came up freely, and were transplanted into the border about the first of June, where the plants flowered the whole season. Probably the seeds will grow freely, if sown in the border in May, if there is not the convenience of a hot-bed. We shall try it so this season.

Verbena vendsa, the veined verberna.—We have noticed this species at some length in our Vol. IV. (p. 217,) where we detailed its cultivation with the other species and varieties of verbenas: we merely name it now, to remark that, though a tender perennial, it flowers beautifully treated as an annual. The seeds, to have the plants flower abundantly, should be sown in a hot-bed in March or April, and the young plants turned out into the border in May. A good rich soil and open situation suits it best.

Didiscus cæruleus, the blue didiscus.—One of the most ornamental annuals that we have for a long time seen, is one which we cultivated last year, under the name of *Trachymène cærulea*, but which, though figured some time ago in the *Botanical Magazine*, has been lately altered by Dr. Lindley, and now called the *Didiscus cærulea*. The plant grows about two feet high, very erect, with rather large foliage, and long stems terminated with an elegant of light blue flowers, resembling the annexed engraving, (fig. 5.) These remain in beauty

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for a long period, and when the flowers fall off, the umbel closes up a conical manner quite ornamental. It is a native of New Holland, and was introduced into England in 1827, but it

has rarely been seen in gardens, until within a few years. The seeds should be sown in pots, as early as the first part of April, and when an inch high, transplanted off singly, into flower pots, where they may remain until the latter part of May, or early in June, when they may be turned out into the open ground. The soil should be rich and moist, and the plants will grow rapidly, and in August will throw up long stems with large umbels of flowers, the most beautiful objects in the border. We exhibited several specimens last season, which were universally admired.

Clarkia elegans, the elegant clarkia.—Though now become quite common, and cultivated in many collections, it is not so well known as it should be. It is of free growth, an abundant flowerer, and a showy and desirable annual. Self sown seeds produce the best plants, and as these generally come up in profusion, after the plants have once been grown in the garden they may be taken up and transplanted, as recommended under the head of *Leptosiphon*. The seeds may be also sown in May for a successional display of flowers during the latter part of summer. A native of California, and introduced by Douglas, in 1832. Last season we cultivated a rose colored variety of this, called *C. elegans* var. *rosea*. The flowers were slightly double; and their pale rosy tint formed a pretty contrast with the purplish shade of the *C. elegans*.

Thunbergia alata alba, the white-flowered thunbergia.—The old and well known *T. alata* is one of the most exquisite climbing annuals cultivated. Its buff-colored flowers, with their dark centre, are always admired. The *T. alata alba* is almost precisely like its parent, except in the color of the flowers, which is a pure and soft white, with a centre as dark, or darker, than the *alata*. So rare is this variety yet, that we could procure but three or four seeds last season, and from them we succeeded in growing only two or three plants. They flowered all summer, but the frost set in too soon to procure scarcely any seeds. We gave the plants the same treatment as the *T. alata*, and they flowered profusely, attaining the height of five or six feet.

Sphænogyne speciosa, splendid sphænogyne.—A new and showy annual, with large yellow flowers, each floret blotched at the base with rich purplish brown. The plants grow about a foot high, with a neat habit, the blossoms appearing on rather long stems above the foliage. It is a native of the Cape of Good Hope, and was introduced in 1835. We planted the seeds in April, in a pot, placed in a declining hot-bed. They came up freely, and were removed to the border the latter part

of May, in good rich soil, where they flowered from August to October.

Schizanthus Priestii, Mr. Priest's schizanthus.—All the schizanthuses are beautiful plants, deserving a place in every garden. The *S. Priestii* is the most delicate of all the species or varieties, the flowers being of a pure white. It grows to about the same height of the *S. pinnatus*. It was accidentally produced among a bed of seedling plants of the *S. pinnatus*, about five years since. We cultivated it last season, and its delicate flowers were a great addition to the flower border. It requires the same treatment as the other kinds, viz. a light, rich soil, and rather sheltered situation. The seeds should be planted in April, in a pot, if convenient, and transplanted into the open ground, in May, but if not, the seeds may be planted in May, and the plants thinned out to the distance of six inches apart.

Eutoca viscida, viscid eutoca.—A very fine annual, growing upwards of a foot high, of a spreading habit, with blue flowers, about an inch in diameter, produced in abundance nearly all summer. It is a native of California, where it was found by Douglas, and was introduced about 1832 or '33. It grows freely with the ordinary treatment of annuals. The seeds may be sown in the open border in May, and the plants afterwards transplanted. It is a good annual for planting in large patches, and is a pretty companion to the nemophila.

Collinsia bicolor, the two-colored collinsia.—A very fine Californian annual, seeds of which were sent to the London Horticultural Society in 1833, by Douglas; but it did not find its way into general cultivation until 1836. When well grown, it is a very showy plant, throwing up a stem, from eighteen inches to two feet high, with small, lateral branches, the whole clothed with a profusion of its blue and white flowers. It does not succeed well in the heat of our summers, and the seeds should be sown in the fall, in the method noticed in p. 135. If large patches of the plants are set out in the border, the profusion of their showy flowers, which will be displayed in May and June, will be the most attractive ornaments of the garden. A light, rich soil, and cool situation, suit it best. Noticed in our Vol. II., p. 181.

Silene compacta, the large clustered catchfly.—There are several species of annual catchfly, but none of them, that we have ever cultivated, equal the *S. compacta*. It grows about eighteen inches high, considerably branched, and every lateral, as well as the main stems, terminated with a very large and dense corymbose cluster of bright rosy red flowers, each individual blossom remaining in perfection until the whole are ex-

panded. In the summer of 1838 we had a large bed of it, and it made an elegant display, until the plants were destroyed by frost. Beside its beauty as a garden ornament, it is a fine addition to the bouquet, and should be cultivated by all who are desirous of possessing summer flowers, suitable for this object. The seeds should be sown early in May, and in any good rich soil the plants will grow and flourish without much care.

Silene multiflora, the many-flowered catchfly.—A dwarf-spreading species, throwing up numerous flower stems, terminated with a single pale rosy blossom. It is a pretty plant for growing in large masses, and when its branches cover the ground, and the whole surface of foliage is ornamented with flowers, it makes a fine display. It grows well in any soil, but flowers the most abundantly in a light, sandy one; it is, in consequence, well adapted to poor soils, and blooms well where many plants would scarcely live.

Silene Tenorei, Prof. Tenore's catchfly.—A new and pretty plant, growing about a foot high, with deep rosy flowers, solitary, in stems thrown up above the foliage. It grows well in any ordinary soil, and the flowers are freely produced all summer. The seeds may be sown in May, in the open ground.

There are several other new and beautiful annuals, which have been lately introduced to Britain. These will be noticed under the head of our Floricultural Intelligence, and we defer describing them, until we have cultivated them ourselves, at the close of the coming season, when we hope to have an opportunity to do so from our own experience. Some of those which are said to be very fine, are *Gaillardia Drummondii*, *Linum Berendieri*, and *Oenothera Drummondii*, each discovered in Texas by Mr. Drummond, just before his death.

Most of the more delicate annuals cannot be sown in the latitude of Boston, in the open ground, until after the first of May; such as it is desirable to forward for early blooming, may be sown in April, in a hot-bed or a frame, and the young plants potted off into small pots, ready for turning out into the border in May, when the others may be planted, and the whole work of the flower garden finished at once.

Having already extended this article to a much greater length than we had intended, we shall defer its completion until our next, when we shall add a list of the most suitable kinds for cultivation, arranged according to their height and color, and some remarks on the best method of arrangement in small gardens, accompanied, perhaps, with a plan.

ART. IV. *Notes on Gardens and Nurseries.*

Mr. Cushing's, Belmont Place, March 20th.—We have not visited this beautiful place, at this early season of the year, since the spring of 1838. Our last visit was made in August of last year, and our remarks, at that time, were mostly confined to the flower garden. The beautiful conservatory and hot-houses were now in fine order; indeed, their appearance has much improved within the past year or two. Many of the plants have acquired a greater size, and, in consequence, flower stronger, and continue in beauty for a greater length of time. Several plants, too, have been added: the number of varieties of geraniums has been augmented by the addition of fine kinds, and the collection embraces many beautiful sorts. Some new stove plants have also been obtained, and among them, the *Ipomœa Horsfalliæ*. It is so long since we have particularly noticed the plants in the conservatory and stove, that we shall give a brief account of what we saw in flower.

The first thing which strikes every beholder, at this season of the year, as he enters the house from the main front, is a mass of rich and luxuriant vegetation, and various colored flowers, standing upon the semi-circular stage at the back of the conservatory, and, forming, as it were, a dense forest: but when we were here, the spectator had only to turn his eye upward, as he stepped into the door, and the roof seemed as if inlaid with buds and blossoms: the whole centre of that part of the house was one mass of flowers; from it hung, in the greatest profusion, the long and beautifully formed clusters of the *Wistaria Consequana*, a plant which we have repeatedly urged upon the notice of every body who loves a beautiful flower, and, we are glad to say, with some effect, as it is now found in many of the collections around Boston; but it is not half appreciated: it need not, we are sure, be confined wholly to green-house cultivation; it stands the winter, unprotected, in New York, and we are confident it can be made to flourish here equally well in the open air. But we have digressed. Next to the wistaria, which covers a large portion of the centre part of the roof of the conservatory, on the left, was a yellow Lady Banks rose, so abundant in flowers as to hide nearly every green leaf, many of its clusters containing eleven and twelve flowers. On the right, in a corresponding situation, the white Lady Banks covered about an equal space, and was also covered with its snow white flowers. These three

plants were, of themselves, sufficient to render a visit interesting, if there had not been another flower expanded.

Besides these, many of the heaths were in flower; *E. cóncolor*, *Bowiedna*, *purpúrea*, and some others. Several large white azaleas were like masses of snow, so completely covered were they with flowers; plants of *A. phœnicea*, *punicea*, *indica ignéscens* and *Smithii*, were also very splendid. Each of these were placed on Chinese stands, solated from the other plants, that their elegance might not be hidden the surrounding foliage. No idea can be formed of the beauty of this tribe, until the plants acquire strength to bloom well. The two front stages were filled with geraniums, and, though nearly all the flowers had been cut but a day or two previous, there was still a fine display. On the front shelf, numerous pots of verbenas and *Clintonia élegans* were interspersed with bulbs and other plants, the branches of the former hanging down three feet or more, so as to nearly reach the floor, and covered with flowers. *Phlox Drummondii* was blooming beautifully.

In the forcing houses adjoining, next to the stoves, we noticed numerous pear, apple, plum, fig, and other fruit trees, in pots, which had flowered, and were setting their fruit: the grapes were also showing enormous clusters of buds on the rafters. A large plant of *Pæonia albiflora Póttii* was coming into flower. Some of the finest neriums we ever saw, were also flowering; their individual blossoms as large as a rose, and the clusters containing from ten to twenty-five flowers. Mr. Haggerston cultivates this plant with great success, and we hope, at some future time, to induce him to communicate to us his mode of treating this much neglected plant. A plant of the new *Clématis Sieboldi* was in full flower, and it is one of the prettiest specimens of this family.

On entering the stoves, a change at once struck us. The vigorous and healthy pine-plants, which, when we were here last, were bending down under the weight of their luscious fruit, were no where to be seen; not a single specimen remained. The whole of the plants had been taken out, and their place was occupied by splendid large plants of *Sálvia spléndens*, in full bloom. Mr. Haggerston was very successful in the cultivation of the pine-apple, and raised some very large fruits; but, from some cause, Mr. Cushing was not desirous of occupying the room in the stoves with them any longer, and, at his request, their cultivation was abandoned for the present. We hope, however, at some future time their growth will be resumed. A new method of heating and ventilating hot-houses, has been

invented in England, by which means pines and all other fruits may be raised, with all the flavor and richness they possess when growing in the open air. We should be glad to see a house erected here upon this plan, and the cultivation of the pine again attempted, believing, from what has been stated by the best English fruit raisers, of the excellence of this new method, that it would be attended with full success.

One of the richest flowers that we have seen for some time, was the *Ipomæa Horsfalliæ* running on the back wall. The plant was set out last year: it had now extended its shoots many feet, and was throwing out numerous clusters of buds, one or two of which were expanded: the flowers are of the deepest crimson, handsomely formed, and frequently appear in clusters of fifteen or twenty together: *I. paniculata* and *insignis*, growing near by, were thrown entirely in the shade by this new and gorgeous species. *Combrétum purpureum*, as usual, was in bloom. That elegant bulb, *Ismène Amancaes*, was also expanding its flowers. A large plant of *Cereus grandiflorus*, in a pot, was full of buds. A beautiful hibiscus, received from China, with nearly white flowers, delicately veined with rose, was in bloom, together with many other showy plants. In one of the stoves, the grapes were half grown, and in the other, the fruit had just set for a succession crop.

Very little forcing has been carried on the past winter; in one of the pits beans were growing, and several crops had been gathered; but besides these, we believe strawberries have been the only thing which have been brought forward.

The old mansion is at last to be removed, and a new one to be erected in its place; and we expect to see in the new house a specimen of architecture, which will excel any thing which has heretofore been exhibited in our vicinity.

Oakley Place, Mr. Pratt's.—We found it but little different here from what we have heretofore noticed. The green-house was filled with the usual collection of geraniums and camellias, and a few other plants. In the collection were some fine large azaleas. Since we were here before, some seedling ericas, which we then mentioned, have come into flower; among them we noticed three or four handsome kinds, but their names we could not ascertain. A pretty little bulb, *Babidna sambuciana* was in bloom, with pale blue flowers.

On the back wall we here also found the *Wistaria Consequana* in bloom, but not in such profusion as at Mr. Cushing's; although the plant is an older one, it is not so favorably situated. We have read some account in *Paxton's Magazine of Botany*, where Mr. Knight, of the King's Road

Nursery, pursued a system, by which he induced the plants to flower three times in the year; his plan was as follows:—Immediately after the first flowering is over in April, (May in the open air,) all the leaves are stripped off the plant, and all the shoots are cut off which have been made by the first growth, to within a few eyes of the main stems; these soon shoot out again, and flower freely in June and July; after the flowers have fallen, the same operation of stripping off the leaves and cutting in the shoots is performed again, and the plants bloom once more in September and October; thus affording a successional bloom for nearly eight months of the year. This operation can only be performed on old established plants, as on younger ones it would tend to weaken them so much as to prevent their blooming with any degree of beauty. We hope Mr. McLennan, or Mr. Haggerston will try this experiment, as both of their plants are sufficiently strong to allow a trial.

In the forcing ground we found cucumber plants just coming into bloom, and melon plants just hilled out, together with frames of radishes, lettuce, &c.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

New method of warming and ventilating hot-houses, green-houses, &c.—A new method of warming and ventilating hot-houses, green-houses, graperies, stoves, &c., has lately been invented, which promises great benefits to the horticultural community. This method is called the Penn system, after the name of its inventor, Mr. Penn, near London, a large iron manufacturer. The plan was first attempted in his own hot-houses, &c., and it was found to be so superior to any thing which has heretofore been tried, that he has already put up the apparatus in the hot-houses and green-houses of several cultivators, both amateurs and nurserymen. Mr. Wilmot, of Isleworth, the great forcer of fruits and vegetables for the London market, has adopted Mr. Penn's system in his pinery; and so satisfied is he that it is far superior to all other modes, that he declares, henceforth, all forcing will be "*a farce*," if attempted by any other plan of heating than that of Mr. Penn's. Pines, which, previous to the time the apparatus was put up, were almost tasteless, have since been cut, promising all the richness and flavor, which have fully entitled them to that character, the king of fruits. Strawberries, which are almost

universally, when forced, destitute of their peculiar flavor, though cultivated with the greatest skill, are said to be as fine as if growing in the open air, and this, too, when standing at some distance from the glass. Without intending to vouch for the correctness of these statements, although made in the *Gardener's Magazine*, over the signature of Mr. Wilmot, we cannot but believe, from what we have read on the subject, that it promises a great revolution in the method of heating and ventilating all kinds of structures for plants.

Mr. Penn's system has not yet been fully detailed, but, from a notice of the same by the conductor of the *Gardener's Magazine*, who has inspected Mr. Penn's different houses, we gather the following information. That the heating apparatus consists of copper pipes, through which hot water circulates; these pipes are placed in a sunk area in the back shed, and between the back of the house to be heated, and the back shed wall; the circulation of the water in the horizontal pipes, which traverse the area from one end to the other, keeps the air heated to a high degree; from the area arise perpendicular pipes, placed at a short distance from each other, according to the length of the house and the temperature required. The hot air ascends through these, and through openings in the back wall, opposite the top of each pipe, the air rushes into the house, and, passing over the plants, it descends through a grating, forming the front walk, or if not a walk, through a grating placed there on purpose, into shallow pits or trenches, which conduct the air to the sunk area, where it is again heated, and again ascends through the perpendicular pipes: thus the circulation is constantly kept up, and there is a continued draft of air through the house. If more fresh air is wanted, this is admitted through apertures in each end of the area, communicating with the outer air, and is admitted in larger or less quantity, according to the temperature desired to be kept up. If there is too much heat, the ventilators must be partially closed up, and the heat not allowed to enter. So rapidly does the air circulate, that if a little essential oil is dropt upon the pipe, the odor of the same is immediately perceived by any one standing on the grating in the front of the house.

Mr. Penn's system can be adapted to any sized or any shaped houses, whether new or at present heated by any other plan; but the cost will be greater or less, according to the facilities for erecting the same; it can be the most neatly arranged, if put up when the house is erected. We shall refer to this again, and accompany our remarks with an engraving more fully illustrating its operations.—*Ed.*

The Rival Yellow Dahlias.—One of the best yellow dahlias which has ever been produced is said to be Cox's yellow Defiance, a seedling of 1833, and repeatedly exhibited at the meetings of the Metropolitan Society of Florists and Amateurs, last season, in stands of six or more blooms, and gained the prize for the best seedling exhibited. The stock of roots has been purchased by the Messrs. Brown, of Slough, and plants are offered for sale at 15s. sterling each. It was figured in the *Horticultural Journal* for October last, and, from the appearance of the flower, we should judge it to be superior to any of the yellows which we now possess; being unexceptionable in form, deep yellow, cupped petals, and constant in its habit of blooming.

Mr. Widnall has also raised a yellow, which he has stated to be "the best in the kingdom," and it has also gained several premiums at the periodical shows. At the Cambridge exhibition both of the yellows were exhibited, and from the *Horticultural Journal* we learn

that there was "a stand up fight" between the two varieties which were exhibited before competent judges, and there Mr. Widnall's was awarded the premium. The same writer then makes the following remarks, in relation to the two flowers:—

"It would be impeaching the judgment of the censors without proper grounds, to assert that they were partial; but we, who fancy we know something about a dahlia, have wondered at the existence of a yellow finer than that raised by Cox, and, without seeing the rival, we felt so confident in our opinion of that which we had seen, that we ventured to back it against any flower that could be produced for any sum. It was in vain people told us what excellent judges the Cambridge folks were—it was useless to prate to us about the London flower being 'beaten all to pieces,'—we concluded there was unfair play somewhere, and have tried to learn where. We saw the two flowers side by side, on Wednesday, (Sept. 25th,) six blooms of each, and what we merely thought before was reduced then to a certainty. We heard too, among the exhibitors, that there was nothing easier than to account for the Cambridge award. It seems (and if we have collected the facts carelessly, or quoted them incorrectly, we shall be glad to set forth a better account hereafter,) that Cox sent eight fine blooms of the yellow, and, not being able to attend, requested the two best might be staged, and the remainder exhibited openly. It seems, also, that two were put up, and that the six never made their appearance at all. It would be unfair to charge the secretary, or any body else, with designedly taking the worst two blooms; but whoever selected them might have done so in ignorance, and as flowers occasionally crumple and collapse, or get pressed and damaged in travelling, there may have been much difference in the compactness and the symmetry of a bloom in the eyes of a real connoisseur, though a common observer may not see it, and, without the least intention, injustice may have been done to the flower. Now it is clear, that, unless there was some object in keeping back the blooms, the other six might have been shown, and should have been shown, not only to illustrate the habit of the flower, but to gratify the public and add to the exhibition: this was not done—the six other blooms, which probably comprised two of the best, were not permitted to be seen, and this, though it might not affect the judgment of the censors, would have enabled the public to see the general habit of the flower, and also to observe whether the best had been put up. The mystery, therefore, of its having been beaten by a worse flower, is partly cleared up by the presumption that two flowers, which had suffered from travelling, and the worst of eight, instead of the best, may have been put up against two fresh cut blooms, and then the disparagement may been sufficiently great to influence the judgment. However, there could be no mistake at Chiswick, each party put up his own blooms, and both varieties were fine; but in one essential property there was no comparison—the beauty of the centre. Not one dahlia in fifty, even of those esteemed, have what can be fairly called handsome centres, and Mr. Widnall's flower is one of the mass—the centre is exhibitable, and that is all. Mr. Cox's is fine, plump, round, and forms a handsome finish to the flower. In two other respects the Cambridge flower is inferior—it quills more, and therefore is not so round."—*Hort. Jour.*

It is somewhat doubtful whether either of these yellows are imported this season, as there are no dry roots for sale, and plants grown from cuttings can only be obtained. There is something to be allowed for prejudice, in favor of Mr. Cox's flower, in the above account,

and their real excellence can only be decided by cultivators who may have the opportunity to grow both.—*Ed.*

FRANCE.

The Billandeau Cabbage, Chou de M. Billandeau.—The Horticultural Society of Paris appointed a committee on August 8, 1839, to examine and report on this cabbage, which is said to be so large that the chou cavalier is a mere dwarf to it. MM. Billandeau are seedsmen in Paris, and they received a plant of this cabbage from a correspondent in the department of Deux Sèvres, where cabbage is much cultivated for feeding cattle. The specimen sent was discovered in a field among others; and, being remarkable for its large size, it was left for three years, and afterwards taken up and sent to Paris. It grew on a sandy soil, with a calcareous sand as a subsoil, and the water is found at the depth of two and a half feet under it. No other variety of cabbage grows higher in this soil than three feet; but the specimen of the chou de Billandeau sent to Paris, measured in height ten feet. It begins to branch at eight inches above the neck; the branches are thirty in number, the lower ones from eight feet to nine feet in length, divergent, recumbent, and curved upwards at the extremities. At the period of flowering, the principal shoot of each of these thirty branches subdivides at the summit into twenty heads of flowers, thus giving on the whole plant forty spikes of seed pods. These pods do not differ from others, but the seeds are less round, and more unequal in size. The leaves of the plant, the committee were assured, were from five feet to six feet in length, pliant, not curled, and resembling those of the cauliflower, but on a much larger scale. The plant was raised from seed along with others, and not from a cutting, as some have alleged. It is considered probable that this variety is a sport from the chou branchu de Poiteau, of which the chou vivace de Daubenton is a sport. It resembles more the latter than the former; but it differs from both in being higher than the chou cavalier, while the chou branchu and the chou vivace are less large than the chou cavalier. M. Poiteau, who is now (Sept. 5,) in London, assures us that this account is not in the slightest degree exaggerated; and, as the seeds, no doubt, will be immediately exposed to sale, such of our readers as are curious in the culture of cabbage will soon have an opportunity of trying the chou Billandeau in England. The report, which is drawn up by M. Poiteau, concludes with the following paragraph:—

“Do varieties re-produce themselves from seed?—We might, and, indeed, we ought, to be asked, whether the seeds of the chou Billandeau will produce plants resembling their parent. To answer this question, we must have recourse to experience and analogy, and say, that, in our own time, there have been formed many tribes or varieties in certain families of vegetables, particularly among cabbages. Thus the Brussels sprouts have not always existed; we have not always possessed so many varieties of broccoli; the branching balsam, the dwarf balsam, the branching China aster, and the dwarf China aster, are the fruits of modern culture, and form races which perpetuate themselves by seeds, the plants which produce these being annually selected, or, at all events, those which appear to deviate from the approved variety are rooted out. In the same way, the varieties of domestic animals are preserved pure, by avoiding cross-impregnation, and giving them suitable nourishment, &c. The seed from a double

dahlia will produce more double ones than that from a single dahlia. The dark brown nasturtium, which we all know was produced accidentally from the yellow variety, re-produces itself and perpetuates itself, by means of selecting the plants that are to bear seed. Curled parsley, which was not known in the time of La Quintinye, and curled Normandy cress, whose origin is still more recent, produce seeds nearly as freely as natural species; the Chinese haricot bean, a dwarf variety with yellow seeds, produces a branching variety with white seeds, which perpetuates itself by seeds. The Spanish haricot bean has given, within these few years, a two-colored variety, which re-produces itself from seed. We could cite many other plants, of an origin more or less recent, that perpetuate themselves from seeds by the means of annual selections; but here is enough to draw our conclusion, that varieties often reproduce themselves from seed and from new races. Thus the cabbage of M. Billandeau, being a variety of extraordinary height and size, can, according to the course of things, re-produce seeds, perpetuate itself, and, by the means of successive selections, constitute at last a permanent race." (*Rapport, &c.*, p. 7.)

These remarks are worthy the attention of the thinking gardener. It appears to us, that it may be laid down as a general principle, that all varieties which originate in seed will propagate themselves by seed to a certain extent, whether they be annuals, perennials, or ligneous plants. Formerly it was generally believed that the seeds of an apple would produce nothing but a crab; but now every one knows that the seeds of any particular variety of apple will produce that variety; perhaps with some slight variations, or, perhaps, with one plant among many so far different as to constitute a new variety or sub-variety; for all varieties originate in sports. Thus, among timber and ornamental trees, the seeds of the purple beech will produce plants with leaves all more or less purple; the cut-leaved common oak, and the cut-leaved or eagle claw maple, reproduce themselves; and we have no doubt, if the weeping ash, which is a female plant, could be fecundated by a male weeping ash, the produce would be chiefly weeping plants; but there being no weeping male, and the plants of the weeping ash, when they produce seeds, having been of necessity fecundated by an upright growing male, the produce is partly weeping and partly upright. We found a proof of what we have stated respecting the oak, in a nursery at Dumfries, in 1831, as mentioned in a former volume; and other instances will also be found recorded in this Magazine, though we have not time at present to search for the references. These will be found in the general index which we are now preparing for the fifteen volumes of this work, now nearly completed. (*Gard. Mag.*)

ART. II. Domestic Notices.

Specimens of the productions of South Florida.—We have received from Dr. H. Perrine, agent of the Tropical Plant Company, Indian Key, specimens of the bark of the indigenous perennial cotton shrubs, and foliaceous fibres of freshly cut leaves of the indigenous agaves, which inhabit the most rocky situations of the Florida Keys.

"The perennial cotton shrubs," Dr. Perrine remarks, "grow to the size of a large peach tree, with trunks, and sometimes even branches,

as thick as my arm. The samples of the bark I send you are stripped from some of the canes of perennial cotton, which I have collected for *gratuitous distribution*." Gathered 14th Feb., 1840—heat 74°—lat. 24° 48' N.—long. 80° 55' W.

You see, hence, 1st, That indigenous agaves are numerous nuisances on the Florida keys, and yet their green, living leaves yield *foliaceous fibres*, which are superior substitutes for common flax and common hemp.

2d, That indigenous gossypiums are also numerous nuisances, and yet their green, living barks yield *cortical layers*, which are *superior substitutes* for common flax and common hemp!

At Lignumvitæ, this week, they have been clearing *acres* of these cotton shrubs, and burning them. As I have shown these people the *value of the bark*, it is to be hoped that even they will at least *save the bark* from the flames! Five zealous collectors of tropical productions of the Florida Keys, in twelve weeks would corroborate all my individual labors of twelve years.

Certainly a Horticultural Society could not better use a half an hour, than in passing a resolution, requesting the members of Congress to do their duty, by the immediate restoration of desert freedom to individual industry in this desert. Barely allow to South Florida the pioneer freedom of the pioneer pilgrims of Plymouth, and its desert districts will soon be blooming with the plants of paradise. Give any pioneer pair the pioneer freedom of our first parents, and in this country and climate of Eden every poor couple may soon create their own garden of Eden.

Please to announce my *readiness* to supply, at Indian Key, gratuitous specimens of all tropical productions of South Florida to every philo-vegeturist, who will endeavor to get them prior to the first of June next.—H. Perrine, Indian Key, Feb., 1840.

We have received from Dr. Perrine some random recollections, relating to the establishment of the Tropical Plant Company, at Indian Key, and shall give some of the most interesting extracts from them in a future number; in the mean time, we invite the attention of our friends to the above remarks of Dr. Perrine.—Ed.

Plants usually considered tender, which have withstood the past winter, in the open ground, without protection.—The following plants have stood out here the past winter without protection, viz:—*Blëtia hyacinthina*, *Alstrœmëria psittacinas*, *Oxalis Bowiei*, *Sparâxis versicolor*, *Gladiolus tristis* and *bimaculatus*, *Fris pavonia*, *Watsônia Meriàna* and *marginata*, *Aster argophyllus*, and some others which I do not recollect now. This evening the air coming in at my window is redolent with the perfume of the green flowered sweet shrub (*Calycanthus glauca*?) and I hear the notes of the whip-poor-will.—M. A. W., Athens, Ga., March 20, 1840.

Early forced Cucumbers.—Cucumbers were produced in the garden of Wm. G. Stearns, Esq., Cambridge, under the management of his gardener, Mr. Hines, on the 16th of last month, the first, we believe, that have been cut in the vicinity of Boston the present year.—Ed.

Instances of variation in inflorescence.—Some curious instances of a departure from the usual forms of flowers, have fallen under our notice. It is generally understood, that in the axils of the stems of plants, at the juncture of the leaves, and indeed wherever two organs are in close continuity, there exists a power of throwing out new leaves, branches or buds. A very strong plant of *Gladiolus natalensis* exhibited this fact, during the last summer, in a singular manner.

After the usual spike had nearly expanded its buds, an axillary spike, or branch, was extended below the original, and gave a considerable bloom. The flowers on this were rather small, but suffered in no other particular.

On endeavoring to seed a multiplex flowered dahlia, the calycine scales were freed from the decaying florets, in order to prevent the destruction of the germs. Instead of answering our expectations, a new series of minute, imperfect buds were formed, beneath the lower scales, each furnished with the imbricated calycine leaves of the regular flower bud.

Tulips sometimes exhibit a marked variation from their usual style. Sepals become leaves, and bractes, or leaves, assume the colors of the sepals. Two or more flowers are produced, where only one should exist. In a Bizarre, called *Imperatrice Romain*, we remember to have seen several such irregular blossoms, creating, as it were, some other plant than a true tulip.

We have, in our herbarium, specimens of *Hépática americana*, in which distinct flowers are produced under the regular ones. The same fact occurs in the double varieties of the daisy, and such a sort is actually known to cultivators, as the profliferous, and trivially distinguished by the name of hen and chickens.

Monopetalous corolled flowers, whose edges are divided into segments, do not continue true to the natural form; the segments of *Primula prænitens*, for example, being oftentime six in number, instead of five. In this case, the variation is an improvement to the style of the flower, and could a permanent variety be produced, where this would always occur, it would be a desirable acquisition to our floriculture.—*Chelmsford, Jan., 1840.*

Plants of Mérica edulis, whose roots are solid tubers, after being in the ground six months, and prevented from making their regular growth on the previous season, are, notwithstanding these disadvantages, appearing above the soil. This extreme power of protracted vitality, in re-producing new tubers upon the old, when deprived of their regular process of increase, by the annual foliage, is a striking provisional law against entire destruction. Amid fearful exigencies, the struggle for continuance and preservation is generally successful.—*C. B. Spec.*

Cocoa-nut squash.—Are you acquainted with the cocoa-nut squash? It is a hard shelled winter squash, shaped just like the autumnal marrow squash. It is perfectly green when gathered, but, if exposed to the light, begins now to put on a yellowish hue. The flesh is of a rich golden yellow, very close, fine and rich, and without any strong flavor of any kind, which forms so much of an objection, with many to the Valparaiso, the marrow, and some other kinds. For eating, I consider it decidedly preferable to any other kind, and such, I believe, is the opinion of all who have tried it, so far as I know. It is, moreover, the best squash to keep that I have ever tried. I have now something like forty of them, and have not discovered a decayed spot in one of them since they were gathered, while the crooknecks, the Valparaiso, and the marrows are with much difficulty kept till this time, and of the two latter kinds, a majority of them have decayed. This is the second season I have had them. Where they originated I cannot ascertain. They came here from Connecticut, or that way. I looked in Boston market last fall, but saw nothing of the kind.—*J. M. E., Worcester, Jan., 1840.*

ART. III. Retrospective Criticism.

Selecting and impregnating varieties of seeds, (in answer to a correspondent, p.81.)—In the last number of your Magazine, the first article particularly attracted my attention. While your correspondent has devoted his pen, as heretofore, to the subject of horticulture and floriculture, his communications have been very interesting, showing that he understood the subject whereof he treats; but, as he has now strayed into agriculture, and undertakes to instruct farmers on the subject of their art, and which art myself, as one, have been engaged in from infancy, it behooves us to correct those flights of fancy which appear so plausible in theory, but in practice are directly the reverse.

On the changing of seed grain, he recommends "to select the best seeds from any neighboring farm," and "*if imported, so much the better.*" And why not select the best from his own farm? The late Mr. Cooper, of New Jersey (and where is higher authority?) has practically established the fact years ago, that, so far from grain deteriorating on a farm, by proper management, always selecting the best, it actually improves!! I do not wish to review his article so as to enter into a dispute with so able a writer, but merely to give some of my own experience on the subject.

During the three years previous to the last, the wheat crop has failed considerably in this section of country, first by the fly, and afterwards by rust and mildew. Owing to these failures the farmers generally commenced changing their seed grain, thinking to remedy the evil. I myself was induced to follow suit; besides trying all the different varieties of wheat in the vicinity, I received some from a considerable distance, as well as by several ships from Tuscany, Poland, Russia, the Mediterranean, Malaga, &c.; but Sir, in *every instance I was disappointed*; and now, after all my trouble and expense, I have returned to the old variety, which I have been cultivating on the same farm upwards of twenty years, and which is yet, in favorable or unfavorable seasons, the most productive variety. It has *not deteriorated*, as far as I am competent to judge, except perhaps being more of a mixture than formerly. All the benefit I derived by changing my seed, was a host of weeds, which will require some years and considerable labor to eradicate, and *some experience*, that will induce me to be more cautious for the future. It has not, however, deterred me from experimenting with all kinds of foreign seeds, only in smaller quantities. I find, by experience, that foreign seeds, particularly wheat, oats, barley, &c., generally produce so poor a crop the first year, that it requires several years before it becomes accustomed to the climate, and that, after the second and third year, if the plants admit of being acclimated, it will then begin to improve; and, for this reason, we ought not to be discouraged if the first crop should be a failure.

Last fall, a year, I obtained a small quantity of a remarkably fine kind of wheat, from Mr. Thorburn, New York. It was late when I returned home: I sowed it, however, and it barely came up in the fall; it was much injured by frost, which retarded its growth in the spring; the consequence was, that the rust attacked the plants when in flower, and the grain was so much shrivelled, that I did not believe it capable of vegetating. I sowed it, however, last fall; it came up, and now looks vigorous; and I have no doubt, that, should the season

continue favorable, this *inferior seed* will produce a superior grain to the *progeny* of the fine sample I first received; showing, conclusively, that *good seed* may produce an *inferior offspring*, and *inferior seed* may produce a good crop; more depending on the seasons than theorists are aware of. Whereas, the ignorant and prejudiced cultivator of the soil is generally compelled to bear the whole of the blame, if he is so unfortunate as to sustain a failure in his crops; it is all attributed to his ignorance or unwillingness to take counsel from wiser heads.

"Potatoes, in particular," your correspondent thinks, "should never be planted on the same farm more than two years, and if a change is made yearly, so much the better." Now I do not wish to dispute his words, but my own experience differs very materially from his views. As a general crop, I have cultivated the same variety of potatoes for at least fifteen years, and, so far from degenerating, they are now, if not better, at least equally as good as at first. I have occasionally selected the largest for planting, and occasionally have taken the very smallest, but never could perceive any difference in favor of the large. To satisfy my own mind on the subject, I at one time planted alternate rows with large and small, the large potatoes were cut in three or four pieces, and planted about ten inches apart in the rows, while the small ones, being planted whole or without being cut, at about five inches apart, produced more potatoes and equally as large. I did not measure them, but was satisfied in my own mind, (and that was all I aimed at,) that the small potatoes, being planted so much thicker, produced the largest crop.

He says, "that Societies should be formed in every county, that they may communicate any intelligence relative to agriculture, and the experiments made, and their results," &c. Much do I wish to see the day, when every county in the Union can boast of its agricultural and horticultural society. I heartily concur with your intelligent correspondent, as regards the intermixture of different vegetables during their inflorescence, and that too much care cannot be taken to keep them at a distance, particularly the Indian corn, the melon, and the cabbage tribe.

However, when he comes to give a history of the improved varieties of grain in Europe, and predicts "that the same results may be accomplished by our own farmers, if they would but pay a little more attention to the cultivation of their farms!! with such a soil and climate, *a thousand fold might be produced!*" I am at a loss to comprehend his meaning. Does he mean to say that we might produce a thousand bushels of wheat, oats, &c., where we now produce only one? Comment is useless. Could not theorists devise some means, for the benefit of the farmer, to induce consumers to make away with the surplus grain now in the country, so as to produce a market for the balance? The farmers have already produced too much, as they are now barely paid for their labor, provided they can find a market; it is sometimes difficult to find buyers at the low price that grain now commands, and farmers are compelled to store their grain, for want of a market at any price. What the consequence will be, when we become so enlightened as to raise "*a thousand for one*," I am unable to tell.—*J. B. Garber, Columbia, Lancaster Co., Pa., March, 1840.*

Fruit buds of Peach trees destroyed, (p. 113.)—A correspondent from Burlington, N. J., says "that all his peaches have been destroyed in the bud, and asks if any of your correspondents can give a rea-

son how it is that they are often so destroyed, &c." Mine, Mr. Editor, have shared the same fate, while within half a mile from my farm, *on the hills*, they are uninjured. The reason, I believe, is, (and I have lost many a crop by its effects,) that whenever the mercury in Fahrenheit's thermometer falls so low as 10° below zero, the fruit buds on peaches are destroyed: cold air is said to be heavier than warm air, and, for that reason, in cold frosty mornings, when the air is not agitated by wind, the coldest air naturally sinks down to the lowest valleys; I have noticed occasionally, that when the cold is equally severe, as indicated by the thermometer, but with a brisk wind, the peaches are not injured. This is additional evidence why tender plants from southern latitudes, are less affected by the cold, on high and exposed situations, than in low and protected sunny nooks.—*J. B. Garber, Columbia, Pa., March, 1840.*

"*I'm nothing, if not critical.*" (In answer to Querist, p. 115.)—Your correspondent, who doubts the proper construction of the term "wherever grown," as given by the "Committee," in awarding the premiums on "native plants," is referred to the proposals for the four ensuing years, for the same object.

The term, to "grow plants," however *horticultural* or *technical*, is not grammatical—and the expression "wherever found growing," would have been more precise and correct than "wherever grown."

The object being to introduce the culture of "native plants," the Society obviously meant to offer premiums for the best exhibition of the same during the first season, whether brought from field or garden.

It is hoped the worthy "grower," alluded to as the "one only who has fulfilled the spirit, if not the letter," will maintain his claim by a successful competition for the premiums hereafter offered for the best "cultivated native plants," and await with confidence the just views and impartial decision of the "Committee on Flowers."—*A Cultivator, though no "Grower," Salem, March 5, 1840.*

Tropical Plant Co., Indian Key, Fla., (Vol. V. p. 449).—In No. 60 of the Magazine of Horticulture, published at Boston, which a friend has just put into my hands, I discover a letter by Dr. Henry Perrine, which reflects upon the inhabitants of Key West generally, and upon this office and the officers of the Customs in particular,—as being engaged in a species of conspiracy against the Tropical Plant Company, or, from motives of jealousy or rivalry, doing all in our power to thwart or retard the operations of that Company. Now, sir, there is not a syllable of truth in all this matter of complaint of Dr. Perrine. Not only has no obstacle whatever been thrown in his way, but I know that various individuals at Key West have taken pains to aid him with such seeds and plants as they possessed; and if the Dr. were more courteous or less censorious, there would scarcely be any limit to such private accommodations. To shew the value of the representations of this monomaniac, I had almost said misanthrope, I subjoin an official correspondence between Dr. Perrine and this office, by which it will be seen, that, so far from throwing obstacles in his way, the officers of the Customs in this District have been more liberal towards him and his enterprise, than the strictness of law warrants. I will here add, that scarcely a week passes during the year, wherein there are not from two to a dozen opportunities of communication between this port and Indian Key, by vessels and boats passing. The mail packet passes regularly twice per month. More than a dozen vessels sail from this port to the Bahamas every season,

and they pass and repass Indian Key, generally stopping there both going and coming.

There is, then, no want of communication, by which Dr. Perrine might be accommodated. All that is wanting is but ordinary attention and energy, and less slander, and all the just expectations of the Tropical Plant Company would be fulfilled, if, indeed, that Company has any thing more than a nominal existence beyond the Doctor himself.

The Doctor desires to make Indian Key, consisting of *twelve whole acres at low tide*, and belonging to one individual, a port of entry, and he has not been over scrupulous in the means employed. He has already proved, in the newspapers, that nothing is wanting to subdue the Seminoles but to make Indian Key a port of entry; and in your Magazine he has more than hinted the making that little spot a port of entry would immediately fill his nursery with tropical plants. The how or wherefore does not so clearly appear; since it would not fit out and send one vessel more coastwise, or to the Bahamas. All that is positively known of the reason is, that the proprietor of Indian Key has given the Doctor one thousand dollars for his pen and influence in his behalf.

The following is the official correspondence alluded to:—

"To Adam Gordon, Esq., Collector of the Customs at Key West, Sir,—I have the honor to inform you, that the Trustees of the Tropical Plant Company have now established, on Lower Matecumba, a preparatory nursery for all valuable plants, which can be profitably cultivated on the most arid soils; and that, as all valuable plants which are usefully grown in the sterile Bahama islands, can be still more usefully cultivated on the arid Florida Keys, it is incalculably important that a cargo of living plants should be thence imported *direct* to the nursery, in the beginning of the rainy season in June.

Confiding, then, in the continued disposition of the Hon. Levi Woodbury to aid the domestication of tropical plants, as manifested in the appended copies of his letters to the Hon. Louis McLane, and to the Hon. Charles Downing, yet fearing some contingency which might prevent their *direct* importation in the only proper season, and hence retard the enterprise a whole year, I earnestly and respectfully beg of you to state, in the most unequivocal terms, first, whether you can and will cause a revenue cutter to import them *direct*, at the appropriate period; secondly, whether you can and will give permission for a private vessel *direct* from the Bahamas, to land them at the nursery, prior to entry, at Key West.

Presuming you have no hostile feeling, either to my person or to this enterprise, I shall hope that the enmity of Key West to Indian Key will not be extended to the direct or indirect injury of the nursery on Lower Matecumba, from the sole fact that it is more remote from Tea Table Key; especially as I never had, and never shall have, any personal interest in Indian Key, and as the Company never shall have any connection with the rival persons, parties, or towns, on this Key.—*I have the honor to be, Sir, your obedient servant,* (signed) Henry Perrine, Superind't of T. P. Co.—*Indian Key, Trop. Florida, 23d April, 1839.*"

The answer to the foregoing extraordinary letter is as follows:—

"To Dr. H. Perrine, Superintendent of Tropical Plant Company, Sir,—In answer to your note of the 23d inst. I have to state, that there is not at present any revenue cutter on this station, under my orders or control, which I could order to the Bahamas, for plants, to aid your Company.

In reply to your inquiry, if a private vessel can be permitted to import plants from the Bahamas *direct* to lower Matecumbe, before coming to an entry at this port, I answer, that, in view of the favor with which the Treasury department regards this enterprise, I can see no objection to the measure, if the vessel so importing be visited by the inspector at Indian Key, and be discharged under his inspection; as the plants are free of duty, and are designed for a public benefit. I would, as Collector, receive the inspector's certificate, and admit the vessel to an entry, after so discharging her cargo of plants at the nursery. It will however be required, in this case, that the Inspector state the value or cost of the plants, either by invoice or on the manifest, so that this office can keep the proper record of foreign goods imported.—*Very respectfully, Sir, I am your obedient servant,* (signed) *A. Gordon.—Collector's Office, Key West, 30th April, 1839.*"

It was a matter of public notoriety, and well understood by Dr. Perrine, that the only revenue cutter on the Florida coast was placed under the commanding General of the army, and was engaged, with other forces, against the Indians. The answer, as will be seen, was as liberal, in furthering the Doctor's views, as he could desire, on the other branch of his inquiry.

The Doctor might be a national benefactor, and I sincerely wish he would so conduct himself, as not in the slightest degree to detract from so desirable a fame.

I beg of you to do me the justice of inserting the foregoing in your Magazine, that such of your readers as supposed me capable of being influenced by the motives Dr. Perrine alluded to, may be undeceived.—*Respectfully, your obedient servant, A. Gordon, Collector.—Key West, Feb., 1840.*

[We give place to the above remarks of Mr. Gordon, to show that we have no prejudice in favor of Dr. Perrine, or of the Tropical Plant Company: for although we view the establishment of that Company as of much importance, still we have considered the subject as one so much more interesting to the agricultural, than to the horticultural, portion of the community, that we have not occupied space with any thing more than mere notices of its establishment. With Dr. Perrine we are wholly unacquainted, and his remarks, to which the above reply is made, were inserted with pleasure, as we thought, from the statement made, that serious obstacles were thrown in the way of the Company to prevent their attaining the results they desired. A controversy of the kind, to which the above may lead, would not suit many of our readers, and we shall hereafter decline any lengthy article, of that character, on either side. But, from what we can learn from information received from Dr. Perrine, we cannot but think that the office holders of Key West are opposed to the interests of the Tropical Plant Company; and that their combined interests will prevent the Co. accomplishing as much as if governmental influence was not so great. We certainly see nothing so very extraordinary in the letter of Dr. Perrine to Mr. Gordon, and are constrained to believe that the statements made by the former, of the influence of the office holders of Key West are, in the main, correct; if not, Col. Harney would not allow his name to be used to confirm them.]

In a previous page we have noticed some of the natural productions of South Florida, sent us by Dr. Perrine; and, as our Magazine is read by several members of Congress, in both branches, we would invite their attention to the subject. If the Hon. D. Webster, of the

Senate, or Mr. Lawrence or Gov. Lincoln, of the House, were to bring the abuses of the government officers, at Key West, before the notice of Congress, we have no doubt that justice would be done to the Tropical Plant Company.—Ed.]

ART. IV. Pennsylvania Horticultural Society.

The stated meeting of the Society was held in its Hall, Tuesday evening, Feb. 18, 1840, the President in the chair.

The Committee on Plants and Flowers awarded the premium for the most interesting display of plants, in pots, exhibited this evening, to Robert Buist; and that for the best bouquet, to Andrew Dryburgh.

The Committee with much pleasure noticed the collections of fine plants, exhibited by Messrs. Norris, Dryburgh, Kilvington, and Parker; and especially three specimens of that new and singular plant, the *Daubenia*, shown by William Sinton, gardener to Gen. Patterson.

By Andrew Dryburgh, *Cineraria fràgrans*, and a seedling *amaryllis* of a character similar to *A. Johnsoni*.

By Joseph Cook, gardener to William Norris, *Amaryllis Norrissi*, a very showy plant; flowers six inches in diameter, color dark red; a hybrid between *africa* and *Johnsoni*.

Plants in bloom exhibited:—By R. Buist, *Acacia intermedia*, *A. longifolia*, *A. thegoniàrpa*, (?) *Azalea indica alba*, *indica Feast's*, and *indica phœnicea*, *Blètia Tankervilleæ*, *Boronia serrulata*, *Burchellia speciosa*, *Camellia japonica* var. *alba pleno*, C. j. var. *Chandleri*, C. j. var. *fimbriata*, C. j. var. *imbricata*, C. j. var. *insignis*, C. j. var. *punctata*, C. j. var. *speciosa*, *Cineraria cruenta*, *Cyclamen cœum*, *Daphne hybrida*, *Epacris campanulata*, *E. impressa*, *E. pallidosa*, *Epidendrum pygmaeum*, *E. polybulbon*, *Euphorbia Jacquinæiflora*, *Erica Hartnelli*, *E. mediterranea*, *Heliotropium intermedium*, *Lecheaaltia formosa*, *Mirbelia Baxteri*, *Primula sinensis*, *Rhododendron arboreum hybridum*.

By Andrew Dryburgh, *Alonsoa elegans*, *Azalea indica phœnicea*, *Camellia japonica*, var. *alba pleno*, C. j. var. *Chandleri*, C. j. var. *Elphinstonia*, C. j. var. *incarnata*, C. j. var. *Pæoniiflora*, *Cineraria fràgrans*, *C. lanata*, *C. platanifolia*, *Erica arborea*, *E. tubiflora*, *Gorteria pavonia*, *Heliotropium peruvianum*, *Hibiscus sinensis*, *Lachenalia pendula*, *Lantana mutabilis*, *L. Sellowii*, *Passiflora princeps*, *racemosa*, *Pæonia arborea*, *Poinsettia pulcherrima*, *Primula sinensis alba*, *Richardia æthiopica*, *Saxifraga ligulata*, *Verbena Drummondii*, *V. incisa*, *V. Tweediedana*, a seedling *Amaryllis*, and a monthly carnation.

By Joseph Cook, gardener to William Norris, *Acacia* sp., *Amaryllis Johnsoni*, *A. Norrissi*, *Ardisia crenulata*, *Arum crinitum*, *Begonia argyrostigma*, *Camellia japonica* var. *Floyii*, C. j. var. *speciosa*, *Cineraria cruenta*, *C. platanifolia*, *Cyclamen persicum*, *Diànthus barbatus*, *Erica mediterranea*, *Eupatorium elegans*, *Heliotropium grandiflorum*, *H. peruvianum*, *Hiræa hirsuta*, *Fris pallida*, *Justicia speciosa*, *Lachenalia bicolor*, *L. tricolor*, *Pæonia arborea*, *Petunia purpurea*, *Poinsettia pulcherrima*, *Primula sinensis*, *Richardia æthiopica*, *Saxifraga arborea*, *Scilla peruviana*, and *Verbena chamædrifolia*.

By John Sherwood, *Camellia japonica* sp., a beautiful plant, variety

not known, as the name was lost in the importation, and *Erica Monsoniana*.

By Alexander Parker, *Floes grandiflora*, *A. lingua*, *A. variegata*, *Anodonta halimifolia*, *Antholyza æthiopica*, *Arbutus Andrachne*, *Cineraria cruenta*, *C. lanata*, *Crassula lactea*, *Daphne odora*, *Epiphyllum truncatum*, *Eranthemum strictum*, *Haworthia margaritifera*, *H. retusa*, *Helléborus viridis*, *Heliotropium corymbosum*, *H. grandiflorum*, *H. Parkeri*, *Justicia speciosa*, *Linum trigynum*, *Mesembryanthemum barbatum*, *M. cordiforme*, *M. crenata*, *M. crystallinum*, *M. dolabriforme*, *M. glaucum*, *M. grandiflorum*, *M. linguæforme*, *M. loratum*, *M. lyratum*, *M. micans*, *M. minimum*, *M. panduriforme*, *M. spectabile*, *Oxalis lutea*, *O. purpurea*, *O. rosea*, *Primula sinensis alba*, *P. sinensis rubra*, *Richardia æthiopica*, *Rochæa falcata*, *R. obliqua*, and *Ruellia anisophylla*.

Indigenous Plants.—By Robert Kilvington, *Aquilegia canadensis*, *A. rabis lyrata*, *Botrychium fumarioides*, and several species of ferns, *Claytonia virginica*, *Corydalis aurea*, *Hepatica triloba*, *Houstonia cærulea*, *Mitella diphylla*, *Phlox subulata*, *Polemonium repens*, *Pulmonaria virginica*, *Tiarella cordifolia*, *Viola cucullata*, and *V. pedata*.

The Committee on the Distribution of Seeds, &c., presented to the Society, submitted a report, from which it appears that two parcels of seeds have been received; one of seeds from Calcutta, presented December, 1838, by Dyllwyn Parrish, from Dr. J. Parrish, to whom they had been presented by Dr. C. Hufnagle, of Calcutta. The other of seeds from the South ern Exploring Expedition, presented April, 1839, by John M'Arann, to whom they had been sent by Hon. J. K. Paulding, Secretary United States' Navy.

The Committee, after forming catalogues, distributed the packages to the members, with instructions to report success. From these reports, the most interesting extracts will be given. Of the Calcutta parcel, R. Buist propagated baubiniæ, *Nelumbium album*, *N. speciosum*: the two latter plants are very rare in this country, if, indeed, they are in existence, except from these seeds; [Some of the gentlemen on the Reporting Committee stated to us last fall, that the *N. speciosum* grew abundantly in the vicinity of the city, in one locality, where it had acclimated itself, and flowered every season. Can this be true?—Ed.] and *Nauclea Gambier*, which is a very beautiful as well as important plant, independent of its splendid flowers; it is the tree from which the Gum Gamboge of the shops is obtained, and a great acquisition to our collections.

Robert Kilvington, *Cæsalpinea sappan*, *Canna nepalensis*, *Cassia fistula*, *C. arborescens*, *Carpopogon pruriens*, *Ceanothus asiaticus*, *Crotalaria* sp., *Cræton polyandrum*, *Flemingia semialata*, *Hedysarum* sp., *Ipomœa* sp., and *Urtica* sp. With others seeds have vegetated, but, being of little importance, notice is omitted. Of those from the Exploring Expedition the Committee anticipated but trifling results, as most of the packages were in a damaged state; some, however, have grown which will be noticed.

William Sinton, gardener to Gen. Patterson, has succeeded in propagating a shrubby *Sonchus* sp., *Erica* sp., *Plantago* sp., *Silene* sp., *Antirrhinum* sp., *Zinnia* sp., *Cereus* sp., *Crotalaria* sp., *Melastoma* sp., *Bursera* sp., *epiphyte* sp., *Pancratium* sp., and *Cytisus* sp. Robert Kilvington, *Cereus* sp., *Erica* sp., *Mesembryanthemum* sp., *Verbena* sp., *Solanum* sp., *Málva* sp., and *Cephalaria* sp. William Chalmers, Sr., *Cactus* sp., *Cassia* sp., and *Málva* sp. Miss Percival, *Zinnia* sp., *Portulaca* sp., and *Viola* sp. (*Committee's Report*.)

ART. V. Faneuil Hall Market.

		From	To			From	To
<i>Roots, Tubers, &c.</i>		\$ cts.	\$ cts.	<i>Squashes and Pumpkins.</i>		\$ cts.	\$ cts.
Potatoes:				Squashes, per cwt:			
Chenangoes, } per barrel,	1 25	1 50		Winter crook neck,.....	4 00	5 00	
} per bushel,	50	—		Autumnal Marrow,.....	6 00	—	
Common, } per barrel, ..	1 00	1 25		Canada crook neck,.....	5 00	—	
} per bushel, ..	50	—		West Indias.....	4 00	5 00	
Eastports, } per barrel, ..	3 00	—		Pumpkins, each.....	20	25	
} per bushel, ..	1 25	1 50					
Turnips:							
Common, per bushel,.....	37½	50					
Ruta Baga, per bushel,...	37½	50					
Onions:				<i>Fruits.</i>			
White, per bushel,.....	1 50	—		Apples, dessert, new :			
Red, per bunch,.....	3	4		Common, } per barrel, ..	2 50	3 00	
Yellow, per bunch,.....	3	4		} per bushel, ..	1 00	—	
Yellow, per bushel,.....	62	75		Russets, } per barrel,.....	3 50	4 00	
Beets, per bushel,.....	50	62½		} per bushel,	1 50	—	
Carrots, per bushel,.....	50	62½		Baldwins, } per barrel,....	4 00	4 50	
Parsnips, per bushel,.....	62½	75		} per bushel, ..	1 50	—	
Horseradish, per pound,...	10	12		N. Y. pippins, } pr barrel,...	3 00	3 50	
Radishes, per bunch,.....	12	20		} pr bushel,...	1 50	—	
Scarlet short-top,.....	12	20		Greenings, per barrel,...	3 50	4 00	
Scarlet turnip,.....	10	12		Pearmain, per barrel,...	3 00	3 50	
Shallots, per pound,.....	20	—		Sweet, per barrel,.....	3 00	3 50	
Garlic, per pound,.....	12	—		Lady Apples, per bushel,...	2 00	—	
<i>Cabbages, Salads, &c.</i>				Dried apples, per pound,...	8½	9	
Cabbages, per dozen:				Pears:			
Savoy.....	37	50		St. Germain, per doz.....	—	—	
Drumhead,.....	75	1 00		Chaumontel, per half peck,...	—	—	
Red Dutch,.....	50	75		Baking, per bushel,.....	2 00	2 50	
Cauliflowers, each,.....	12½	25		Grapes, per pound:			
Lettuce, per head,.....	6	10		Black Hamburg,.....	—	—	
Tomatoes, per dozen,.....	50	75		Malaga,.....	17	20	
Celery, per root:				Cranberries, per bushel,...	3 50	4 00	
Common,.....	6	8		Lemons, per dozen,.....	20	25	
Bailey's Giant,.....	10	12		Oranges, per dozen :			
Spinach, per half peck,...	10	12½		Sicily,.....	25	—	
Dandelions, per half peck..	25	—		Havana, (sweet).....	37½	50	
<i>Pot and Sweet Herbs.</i>				Pineapples, each,.....	25	37½	
Parsley, per half peck,.....	50	—		Coconuts, each,.....	5	6	
Sage, per pound,.....	17	20		Chestnuts, per bushel,.....	4 00	4 50	
Marjorum, per bunch,.....	6	12		Walnuts, per bushel,.....	1 75	2 00	
Savory, per bunch,.....	6	12		Almonds, (sweet), per pound,	—	—	
Spearmint, per box,.....	25	—		Filberts, per pound,.....	4	—	
				Castana,.....	4	—	
				English walnuts, per lb.....	5½	6	

REMARKS.—The earlier part of the month, together with the closing days of February, was as remarkable for its mildness as January was for its severity. Up to the 10th or 12th of the month there were but few frosty nights; the frost was also mostly out of the ground, and in warm, sheltered situations planting was commenced; and in West Cambridge some of the market gardeners had their early peas up. But the weather from that period became cooler, and the latter part of the month has been as cold and disagreeable as the first part of it was mild and pleasant.

We have to note but a very slight variation in the state of the market since our last. The stock of most articles has been kept up, and

prices have remained without much change. Potatoes have come to hand: some eastern cargoes have arrived; a small lot of French potatoes (three or four hundred bushels,) were sold last week at auction; there appears to be a sufficient supply to last, until the new crop comes in. White onions are nearly gone; silver skins are abundant and cheap. Of beets, carrots, &c., a full stock. Radishes, of both the scarlet short top and scarlet turnip varieties, have been received in tolerable abundance since our last; the former very large, handsome, and of superior quality. Horseradish plentiful.

The stock of cabbages holds out well; very good heads are now brought in, which are sold at quotations. Cauliflowers and brocolis are about done for the season. Lettuce more plentiful and of much better quality than at the time of our last report. Forced tomatoes come to hand in small quantities. Very little celery, of good quality, is now to be had. Spinach very abundant. Dandelions more plentiful; in the early part of the month some were brought in from the open ground. A few of the purple fruit of the egg plant have been received from Cape Haytien, but not in very good condition. Some squashes have been received from the same place; they have a green spotted skin, otherwise resembling in form the West Indias; crooknecks and autumnal marrows are very scarce, only a few remaining. Some small lots of West Indias have arrived.

In fruit, though there has been a fair supply, the demand has not been great. Good apples, of several of the kinds named, are to be had at quotations; some are nearly gone, such as the blue pearmain, greening, sweet, &c. Dried apples have advanced to the high rates of our prices. Pears remain the same. No good grapes in the market. Cranberries without alteration since our last. Lemons very abundant and cheap; several arrivals the present month have filled the market. A few pine-apples remain on hand, but not of very excellent quality. In nuts there is but little doing, and no change in prices.—*M. T., Boston, March 28, 1840.*

ART. VI. Obituary Notice.

HON. JOHN LOWELL.—It is with deep regret that we record the decease of this estimable man. He died suddenly, while reading in his chair, at his residence, Broomley Vale, Roxbury, on Wednesday, March 11th, 1840, at the age of 70 years. Mr. Lowell's health had been declining for several years. In the fall of 1837 he visited Cuba, where he spent the winter and returned in the following spring, his health considerably improved during a winter sojourn in that warm climate. While in Cuba he paid considerable attention to the Flora of that island, and he brought out with him a variety of plants, including a number of new species of the Cacti tribe, some account of which we have already given, (Vol. IV., p. 251.) For many years Mr. Lowell has resided upon his beautiful place, in Roxbury, (wholly created by his own cultivated and refined taste,) retired from society, and devoting his attention to agricultural and horticultural pursuits, in which no man with whom we were ever acquainted was more enthusiastic; and in his death these sister arts have lost one of their brightest and most noble ornaments, and the whole community an upright, honest, and liberal citizen. The crowded state of our pages renders it necessary for us to put off some further remarks upon his life till our next.

HORTICULTURAL MEMORANDA

FOR APRIL.

Grape vines, which begun to push their buds last month, and have now advanced so as to show their embryo clusters of fruit, should be now carefully watched; break out all weak buds which may appear on the main stems; and if, from the vigor of the vines, all should push, it is well to take out a few of the less vigorous ones; syringe occasionally, until just before the flower begins to open, and give good quantities of air. Tie in all shoots designed for next year's bearing wood.

Grape vines in the open ground, of tender kinds, should be uncovered and tied up to the trellis. *Isabellas*, and other hardy kinds, should also be carefully fastened to the trellis or wall.

Gooseberry bushes, and *Currant bushes*, should be pruned, the ground manured around, and lightly dug.

Raspberry bushes, not already uncovered, should be taken up immediately; tie the shoots up to straight poles.

Strawberry beds should be attended to; if the beds were not manured in the fall, they should be done so now; take any well decomposed manure, and spread it thoroughly over the surface: if the ground admits, it should be dug in, but if the vines are so thick as to prevent this, let the manure lie upon the surface.

Fruit trees, of all kinds, may be set out this month.

Grafting may be performed all the month.

Peach trees in pots, bearing fruit, should be well watered, occasionally using liquid manure.

FLOWER DEPARTMENT.

Camellias will now be growing rapidly, if they have been properly treated; shade the plants if the situation is too sunny, and syringe them twice a week. Inarching may be successfully performed now.

Dahlias may still be forwarded; young plants, of this year's growth, should be re-potted, if they require it.

Heath and Epacris cuttings may be yet put in with success.

Gladioluses, of all kinds, may now be set out in the open border.

Tyger flowers, *Amaryllis formosissima*, and *Tuberoses* may be set out in pots, and placed in the hot-bed, green-house, or parlor.

Hyacinth and Tulip beds will need to be immediately uncovered, if not done before; as soon as the plants are two inches high, loosen the soil between the rows with a small trowel.

Pansies should be uncovered; seeds may be planted now in the open ground.

Rocket and tall branching Larkspur seeds should be sown as soon as the ground can be got ready.

Tender annual flower seeds may be sown in pots, and placed in a hot-bed, green-house, or frame.

Carnations, protected in frames, should be exposed to the air as much as possible.

Herbaceous plants should be separated and reset in the border.

Geraniums, in flower, should be well watered.

Verbenas, if wanted to ornament beds on turf, or to plant out in the border, should now be increased by cuttings or layers.

THE MAGAZINE

OF

HORTICULTURE.

MAY, 1840.

ORIGINAL COMMUNICATIONS.

ART. I.—*Random records and recollections respecting the establishment of the Tropical Plant Co., Indian Key, Fa.*

By DR. H. PERRINE, Superintendant of the Tropical Plant Co.

Jan. 30, 1840; heat 75° to 60°—By the perusal of the pages of the Magazine for the year 1839, I am convinced that it has some reflecting readers, with sufficiently extensive intelligence to appreciate the national importance of every word, in every sentence, from even my random pen, on the tropical phenomena of Tropical Florida. I am therefore employing casual intervals in random records of spontaneous recollections and reflections, all necessarily connected with the vital topic of speedy domestication of tropical plants in Tropical Florida. You will perceive, that now I have necessarily become a zealous advocate of the entire restoration of natural freedom to individual industry, in the desert district of Tropical Florida. Had I a little more strength and life, I should not despair that my single pen would overcome all the unnatural obstacles inimically interposed by the ignorant government of my inexperienced countrymen!

Now at this critical conjuncture, every day is of especial importance, to counteract the oratorical slanders of the senator Preston, by demonstrating the irrefutable reality, that Tropical Florida possesses the most productive and most profitable soils of the United States, for poor propagators of perennial plants. The same physical proofs of the profitable

productiveness of these slandered soils for *perennial plants*, are also positive proofs of their *unprofitable unproductiveness* for *annual plants*. Hence the corollary is clear, that large planters, with numerous slaves, cannot pursue any profitable agriculture in Tropical Florida; yet, that small cultivators, with white families, can pursue the most profitable vegiculture in Tropical Florida.

By a geographical diagram of Tropical Florida, below a line running east and west through Cape Romano and Cape Florida, I trust that the most ignorant eyes will learn more important facts concerning this most desirable section of the Union, than the most learned eyes, by poring over all the fanciful maps that have ever been published of this *unsurveyed, unseen, unknown* tropical country! You know that a map of the Peninsula was made in 1838, by Hood, and published by order of the Secretary of War. Now I will defy all the officers of the United States' Government to show a single sufficient datum for the correct delineation of any ten miles of the coast, between Cape Sable and Cape Florida. I will go further, and defy them to produce proofs of the correct delineation of *any single mile* of the coast, commencing twenty miles south-west of Cape Florida, and ending ten miles east of Cape Sable! Now, with the aid of that diagram, you can demonstrate to every body, that the south coast of the Peninsula, and the intervening shallow waters and numerous islands from the north-east point of Key Largo to the north-east point of Key Vacas, could not have ever been explored by any wrecking vessels, revenue vessels, and naval vessels of the deep channels inside the reef, but outside of all the outside islands!

Feb. 1, at night, heat 78° to 81°.—I have been over at the nursery all day, with the black philosopher, African March. During the last of February, near the mouth of the Miami river, Mr. Howe and myself went into the pine woods, several rifle shot distances beyond the military post, (Capt. Russell, of that post, was shot a few weeks afterwards.) We there obtained some roots and seeds of the *Zamia integrifolia*. As the calcareous soil is there mixed with silicious sands, I considered the experiment of national importance, to determine whether these most valuable bread roots of the world would also flourish in the exclusively calcareous sands of the Florida Keys. They were therefore brought to Lower Matcumba, and planted on that shell bank, which Capt. H. declared, became *as dry as an ash heap*, and on which, hence, he declared that no valuable vegetable will grow. Now, to-

day I have discovered that one of the roots has absolutely protruded three conical heads, which, when enlarged to mature size, will contain the ripe seeds. Another root is also exhibiting its first conical fruit, and I doubt not that before the end of the year, from their transplantation, they will all exhibit the same important phenomena. Not a single seed, however, has yet germinated, although planted at the same period.

In October, however, I was agreeably surprised by the announcement of the Bahamians, that at Key Vacas some coontee roots had been noticed, in calcareous sands, of apparently spontaneous growth. I earnestly urged Capt. William Whitehead to bring me some samples, and on the 5th of November, he delivered to me two roots, which I planted in the gravelly marl of my door yard, which you know cannot extend three yards beyond the sea-water in the cellar. But I did not plant them out until the 21st of December, and hence, if they grow, that additional delay will be an additional evidence of their great tenacity of vegetable life. Now, on the 17th of this month, Mr. H. and myself expect to take another cruise, when I shall visit the very spots on Key Vacas where these plants are said to be in spontaneous growth; and the important facts shall be duly communicated to the public. Now old Cooley, whose family was murdered, says he will be willing to pay five dollars an acre for solely the privilege of digging the spontaneous coontee roots near Cape Florida!

I trust I shall not be suspected of any insincerity in my irrefutable assertions of the superlative healthiness of the calcareous soil, as well as of the tropical climate of South Florida. You know that the official slanders of our governmental officers had created such impressions on even my own mind, that in the Senate report, I solely insisted that the *benignity of the climate* would counteract or counterbalance the *malignity of the soil*. But ever since the 1st of September, when Mr. H. and myself first advanced a half mile into the calcareous prairie east of Cape Sable, and when, by cruising along the coast, we had convinced ourselves that Dr. Leitner had mistakenly called *clay* the subsoil, which is pure *calcareous marl*; I say, ever since, I became personally convinced, that the whole earth of Tropical Florida, below a line from Cape Florida to Cape Romano, is exclusively calcareous earth. I have also become medically convinced of the superlative healthiness of these slandered soils. Read my papers in the *Farmers' Register*, and defy any *intelligent physician* to disprove either the facts or arguments by which I have irrefutably

demonstrated the extreme healthiness of these calcareous soils. But remember, that the governmental obstacles to individual industry, on these slandered soils, have always been the insuperable obstacles to their agricultural improvement, and profitable cultivation.

Look again at the diagram, and you will perceive how the agricultural prosperity of all South Florida has been absolutely sacrificed to the speculating prosperity of the small speck called Key West! Look again at the dim points called Indian Key, of twelve acres, and Tea Table Key, of four acres. Is it not a monstrous absurdity, that individual claims to private speculations on sixteen acres of public lands, should exert any active influence against the entire restoration of natural freedom to the desert district of South Florida? Look again at the private lands of Key Biscaino, at the other end of the reef, which render military troops subservient to private speculation. The strife will now be to have the next port of entry established at Key Biscaino, because it will not so much diminish the exclusive monopoly of Key West, as would the natural location at or near Key Tavenier, the natural rendezvous of the wreckers themselves.

We must have desert freedom for pioneer settlers, during the first ten or fifteen years. We must have agricultural freedom from all governmental fetters imposed under the destructive forms of unnecessary revenue laws, and of speculating wrecking officers. We must have the agricultural freedom of the pioneer pilgrims at Plymouth, during the first fifteen years of the natural privations of a desert wilderness. We must at least have the democratic freedom of the desert districts of the royal island, our neighbor, Cuba. In 1817 the royal decree democratically declared "entire exemption from all governmental fetters of exclusive monopoly, direct taxation, and revenue law, for fifteen years, to all pioneer cultivators of the desert districts of that delightful island." The natural results have been prosperously manifested by the *speedy* population of those *desert* districts of three hundred years, which otherwise would have remained desert districts during another century. You know that the exclusion of sites for maritime ports and cities, under my congressional grant, was made by my own suggestions. So far am I opposed to all wrecking speculation, that the location of my six miles square shall be made at some spot which cannot ever be approached by any wrecking vessel, revenue vessel, or naval vessel. Hence my preference of the south coast, and of the shallow waters and sheltered islands between the mainland and the outside islands of the reef.

You know that in a single year I have practically demonstrated the superlative superiority of South Florida for the perpetual production of raw silk. The fundamental facts are the daily reproduction of the evergreen leaves of the Manilla Mulberry during the *coldest days in the year*, and the daily hatching of the ever-feeding silk worms, during the same coldest days of the year. Yet the speculating interests of our ingenious Yankees has enabled them to turn the very worst facts against silk culture, in their own intemperate climate, into their very strongest arguments against silk culture in its most natural climate. Why, even G. B. Smith, the Magnus Apollo of the mulberry speculators of the Northern States, has the monomaniacal audacity to urge the *want of ice houses* as a great objection to the culture of silk in Tropical Florida! What would be thought of such an objection to the hatching of hens' eggs, or to the feeding of fowls in South Florida? What would be thought of such an objection to the laying of eggs at all seasons, in Tropical Florida? Now it should be evident to you, that the silk butterflies' eggs, like turtles' eggs and birds' eggs, enjoy their innate vitality, during periods, and under circumstances, regulated by nature alone, and that art cannot protract that innate vitality, but may accelerate its sensible developments; e. g., the eggs of hens may be left a given period, and at any day during that period may be exposed to the animal heat of any fowl, or to any artificial heat of any human contrivance, and they will then hatch in a given number of days. Now apply these facts to the successive generations of silk worms in their natural climate. Like chickens, the silk worms may be hatched at any hour of the year; like fowls, the silk moths may lay their eggs at any hour of the year. Some species lay eggs which will hatch only at the end of six months, in the natural weather of a tropical atmosphere; but if these eggs are laid in each month of the first six months, their progeny will issue in every month of the next six months, and you will thus have a monthly crop of silk worms, from six months' hatching eggs. Here we have had silk worms daily issuing since the middle of November, and if we reserve only a pair of moths each fortnight, till the middle of May, we can have fortnight crops of common silk worms. At all events, the Bengal Assamese species do yield six to twelve successive generations in one year.

Feb. 3.—A cold day for South Florida; thermometer 66°, yet you will see, by my digest of four years, that the greatest change of any day has not been equal to the sudden changes of single hours in Boston. Is it not a deplorable fact, that

my single philo-vegicultural pen, on a distant, desolate rock, is morally compelled to combat alone, the deadly slanders of all the public officers and public presses of the whole United States! The sympathy and support of the whole philo-vegicultural community of the United States should be powerfully combined with my isolated efforts to obtain the bare restoration of desert freedom to agricultural industry, in the desert district of Tropical Florida.

You perceive how I contrive to extend, on every possible occasion, the locally well known character of Mr. Howe, throughout the agricultural community of the United States. You know that hence, to fill any future public office, the nation and the government must necessarily know that he has greater merits than any other resident of South Florida. Both as a private citizen and a public officer, through many years, he has necessarily acquired the greatest possible rights to public office, and to governmental preference. With him for the new collector of the new port, and with his agricultural affection for private life in the desert mainland, there would be removed the most serious obstacles to individual industry, from inimical officers, and inimical laws of the revenue department. The abolition of all revenue fetters on agricultural industry, by abolishing all special ports of entry, does not imply the abolition of custom-house officers. In *free* ports they are as necessary as in *duty paying* ports; and a collector is as necessary to superintend the importation of articles free of duty, as of articles burthened with duty. By the bye, what an odd, unnatural phrase is "revenue duty," for the true phrase of "indirect tax!" In going back to the first principles of natural rights, for the immediate restoration of desert freedom from all revenue fetters in desert Florida, I do not expect that the government of the United States, or its party-fighting congress, is yet sufficiently enlightened for the requisite repealing legislation of the present session in Washington. But I do expect, that the official investigation which should be excited by my solemn allegations will necessarily result in the establishment of an additional port of entry, this very winter, at or near the natural rendezvous of the wreckers themselves, where the first port should have been established at the first acquisition of the territory.

I have just read the *Report* of the Secretary of War. It still retains the deadly phrase of the deadly climate—benign to the savages, but deadly to the whites!! As he admits that the expulsion of the savages "will probably require other means than those hitherto tried," he virtually confesses that it will

never be effected by the army and by the navy! Any personal observer of military troops in a desert district, must know that, like all other hireling servants, remote from the eyes of their masters, they must, necessarily, sacrifice their master's interests to their own interests! But Poinsett is misled by incompetent reporters of the soil and climate of Florida. He cannot refer to Tropical Florida, because he cannot have any official data. The only troops and the only periods of their presence in South Florida cannot have afforded any data for the deadly slander of a climate deadly to the whites. The only reporter, surgeon Lawton, in his letter to Benton, affirmed the healthiness of the country near Cape Sable. To me it is wonderful that the intemperate crews on the reef do not all die from the habitual imbibition of liquid poison! Is it not astonishing that the climate and the soil and productions of paradise itself should be thus traduced by the inimical government of the United States? You know that the most luxurious enjoyment of our immortal Washington was a West India garden.

Let Poinsett come, incognito, to South Florida, and in two weeks, aye, in two hours, he could and would convince himself that it is the most desirable district of the Union. I shall endeavor to have a congressional call for official proof of any cases of deadly sickness, from Indian Key to Cape Romano and Cape Florida.

Feb. 8th, 3, P. M.—Capt. Housman has just sent me a sweet potato, weighing ten pounds and a quarter. What think the ignorant northerners of this mammoth product (10½ lbs.) of a coral rock?

6, *P. M.*—Negro boy has brought me five sticks for canes, including three of the perennial cotton, indigenous to these Keys. Shall I send a cotton cane to orator Preston, for practical proof that perennial plants are the only valuable vegetables which can be profitably propagated in this calcareous soil? By the remarks of the editor Ruffin, in the December number of his *Register*, you will perceive that he begins to get a glimpse of the great merits of my characteristic ambition—the profitable propagation of perennial plants on the poorest soils by the poorest families. My practical demonstration of the superlative superiority of the Florida Keys for the perpetual production of raw silk, alone should entitle me to the gratitude of my country. Throwing aside the merit of the first introduction of the *Morus multicaulis* at Cape Florida, the 20th of May, 1833, taking only the labor of my family and of my pen on this islet for one year, and my demonstrations that all these arid Keys can be covered with the evergreen Manilla mulberry, and con-

sequently with a dense population of small cultivators and perpetual producers of raw silk,—why, this single service alone is worth millions of dollars to my country. These Keys alone will yield at least five millions of pounds of raw silk every year!

9th.—Sweet potatoes absolutely force the rocks out of their way! The castor oil herb of the north you know here is a woody tree, of which you can cut chips. I am going to look at an indigenous cotton tree, said to have a trunk nearly as thick as a man's body—suppose it only the size of a leg or arm. I have *canes* of the wild sage. Your Yankee wood cutters would make money here by canes alone.

11th.—Mr. Howe and myself have been with Capt. H. to Lignumvitæ. I have taken the dimensions of woody branches of perennial cotton, and woody stems of perennial okra. The negroes were cutting down the forest trees to collect the perennial beans. I shall send two varieties of the latter to every member of Congress, with the following inscription, "Lignumvitæ, lat. 24° 50' N., lon. 80° 57' W., heat —. Perennial beans of perennial woods, or, ever-bearing beans of ever-green flowers; green and ripe fruit on the same vines, Feb. 11, 1840. Pecuniary premiums to private citizens, with entire exemption from governmental control, the only means to catch and kill ferocious beasts or murderous savages, with ever growing food in a desert district."

12th.—A transient vessel has brought from Key West my periodicals, i. e., the Magazine for January, the *American Silk Journal* for December, and the *Genesee Farmer*. I seriously believe that they destroy many things sent for me through Key West. By a *South Floridian* of February 1, I perceive they have begun their *public warfare* upon me, by way of editorial comment on my article in the Magazine. Not content with the destructive retardation of the enterprise during a year past, they are now adding insult to injury, by ridiculing the results. Unless much money can be immediately made, they consider all useful pursuits, of prospective benefit, to be absolute madness. They cannot appreciate the fact, that the experimental labors of my family, in the rearing a few silk cocoons, are of more importance to South Florida than all the labors of all other families in South Florida. They cannot appreciate the fact, that my practical demonstration of the perpetual production of raw silk during one year, on this reef, is of infinitely greater importance than the customary occupations of a million of degraded beings like themselves. They cannot realize the truth, that the propagation of the Manilla mulberry

on these Florida Keys will convert them all into prosperous gardens, with a poor population, which will produce, annually, millions of pounds of raw silk.

A chartered company, with extensive funds, could not do any profitable business so long as this monopoly* exists, and the greatest use of the company would be, the counter-combination of philo-vegiculturists, to destroy this anti-agricultural monopoly, and, with it, the obstacles to individual industry. Restore desert freedom to-morrow, and I should not take a single step to organize any company. All I want, is to clear the way for the labors of vegiculturists; and then, let individual industry for individual interest, complete the enterprise. I have always been a collector and distributor of facts and plants for the benefit of mankind—a gratuitous collector, a gratuitous distributor, and a zealous exhorter. I have never derived one cent from any traffic in plants, and never wish to earn a cent. But I do wish to create here a dense population of small cultivators, with virtuous habits and civil law. Had I with me, on the main land, only nineteen families like the pioneer pilgrims of Plymouth, I would bid defiance to the wrecking and rumming population of the reef. If only two zealous vegiculturists will come here, and use their pens, I will gladly resign my own.

There can be no doubt of the immense importance of direct importation of the Bahama plants into the same parallels of latitude in South Florida. The same plants in the Bahamas are better for Florida than any of the same kind of Cuba, because the Florida and Bahama Keys are equally arid and rocky soils; and the plantains, &c. are hence already hardened to arid soils. But the Bahama plants have the additional advantage of gradual acclimation. They have spread gradually into the northern Bahama Islands, and can hence be at once transferred to 26°, or even 27°, in Florida. If carried lower, to Lignumvitæ, for example, they will actually lose the hardness of acclimation acquired in the higher latitudes of the Bahama Islands. Every vessel north-east of Key West, has to make four unnecessary voyages for one direct trip to the Bahamas. Say, for example, a vessel at Indian Key must first go seventy-nine miles south-west, to

* Dr. Perrine here alludes to the monopoly of government office holders and the wrecking population of Key West, who, it seems, from his remarks, only a portion of the most interesting of which we have room for in our pages, have interposed many obstacles to prevent the speedy establishment of the Tropical Plant Company.—Ed.

clear, and then come back seventy-nine miles to be at the natural point of departure. On her return she must pass Indian Key seventy-nine miles to enter at Key West, and then come back seventy-nine miles to discharge cargo. But the two unnecessary voyages from Key West to Indian Key, against the trade wind, are equal to six voyages with it. You know that hence to Key West, the voyage is made in one third of the time requisite to come from Key West to Indian Key. The result is, you must multiply by eight the distance south-west, to equal the waste of time and space; that is, $79 \times 8 = 632$ miles absolutely wasted by every vessel of Indian Key desirous to proceed to Nassau! Of course, the further north-east on the coast, the greater the distance to be multiplied by eight. From Cape Florida to Bemeno Island, or Northern Fresh-water Key of Bahama, is only sixty-eight miles east, and two miles north, or seventy miles in all; but to Key West, the distance is one hundred and sixty-seven miles south-west; multiply this by 8 = 1336 miles wasted by every vessel from Cape Florida! And yet, the Key Westers say that a port of entry is not necessary!

H. PERRINE.

Indian Key, Fla., Jan. 1840.

We invite the attention of our friends to the above remarks of Dr. Perrine: they contain much useful information respecting that portion of the southern extremity of Florida, the soil and climate of which are almost entirely unknown. The design of the Tropical Plant Company, is to introduce and domesticate the tropical plants of the neighboring islands in the same latitude, and gradually to extend the productions of the Tropics throughout the whole of South Florida. Dr. Perrine is deeply interested in his new enterprise, and if only a few cultivators, as zealous as himself, could be induced to emigrate to Indian Key, and commence the cultivation of the mulberry and the production of silk, we have no doubt their experiments would be attended with such great success that others would soon follow, and in a short period all the anticipations of Dr. Perrine would be realized. There is not the least doubt but that the production of silk in that climate, where the mulberry is perpetually in foliage, and where the worms can feed the year round, may be prosecuted with enormous profit to all who may commence the enterprise. We hope the assurance of Dr. Perrine, of the healthiness of the climate, will be an inducement to some of our enterprising New Englanders to accept of the terms which he holds out to all who may wish to reside at Indian Key.

ART. II. *Pomological Notices; or, Notices of new and superior varieties of Fruits worthy of cultivation.* 1. *List of Apples, Pears, Plums, &c. of American growth, in the collection of R. Manning, Pomological Garden, Salem, Mass.* Communicated by Mr. MANNING. 2. *Notice of a new seedling native Apple, called the Hartford Sweet.* By Dr. E. W. BULL, Hartford, Conn.

WITHIN the few past years a great number of new varieties of American fruits have been introduced to notice; most of these have been found wild, having accidentally sprung from the seed, and arrived, in some instances, at a somewhat mature age, before their excellent qualities were fully known and appreciated; others have been raised from the seed by amateur cultivators, who have planted with the hope of procuring some new and superior kinds. From the number of varieties which have already been collected together, we have no doubt but that, with careful attention, many more will still be added from various parts of the country, wholly the product of our orchards, where they have sprung up accidentally from the seed, and produced their fruit.

The importance of selecting and carefully cultivating those seedling varieties, which have, thus far, been found growing in situations and under circumstances to leave no doubt of their being native productions, and have appeared to possess superior qualities, has arrested the attention of many ardent cultivators; and to some of the more zealous, the lover of good fruit is much indebted for the introduction into our gardens of a portion of the most valuable and choice kinds.

Among those gentlemen who have been foremost in seeking out new native fruits, describing their qualities, and introducing them to the notice of cultivators generally, may be named our correspondent, Mr. Manning, of the Pomological Garden, Salem, Mass. His collection contains, besides his great assortment of foreign fruits, as large, or a larger number, of exclusively American varieties, than is to be found in any other. A part of these only have, as yet, borne fruit under his care, and, consequently, are not yet confidently recommended for cultivation, but as soon as they come into bearing, their qualities, as desirable kinds, will be particularly noted, and made public. We feel highly gratified in being able to state that this will be done through our pages, and we confidently hope that it will add much to the value of our Magazine.

We have heretofore, in our articles under this head, hinted upon the importance of cultivating exclusively American fruits. So far as experience has been any guide, it is acknowledged that many of our native varieties have not been surpassed by any foreign fruits; and when the health, vigor, and character of the trees are taken into consideration, compared with foreign kinds, we believe that there is but one opinion, that they far excel, and are indeed the only varieties which can be fully relied upon for certain and productive crops. We have invited the attention of cultivators of fruits to the necessity and importance of raising new varieties. There can be no doubt but that their experiments will be crowned with success, and, eventually, our own fruits will equal in number, and surpass in quality, those introduced to our collections from abroad.

The following varieties have all been proved by Mr. Manning; some of them have already been described in our present and previous volumes; those which have not, will be fully noticed hereafter.

APPLES.

Aunt Hannah	Kilham Hill
Benoni	Lovett Sweet
Baldwin	Lady's Sweet
Boxford	Lyscom
Bowback Sweet	Murphy
Blue Pearmain	Minister
Baltimore	Nichols' Sweet Spice
Black	Nonsuch
Crowninshield Sweet	Ortley Pippin
Conway	Orange Sweet
Chandler	Phineas Red
Conant's red Winter	Putman's Harvey
Danvers Winter Sweet	President
Early golden Sweet	Pennock's Red
Early Bough	Pumpkin Sweet
Early Borden	Porter
Fameuse	Peck's Pleasant
Fall pippin	Pumwater Sweet
Fall Harvey	Roxbury Russet
Green Winter Sweet	Rhode Island Greening
Haskell Sweet	Republican Pippin
Hay Boys	Red Crab, Manning's new
Hubbardston Nonsuch	Red and green Sweet
Jonathan	River Apple
Jersey Sweet	Summer Pearmain

Summer Rose
Summer Queen
Superb Sweet
Smokehouse
Swaar
Swett Russet

Summer Pippin
Triangle
Tolman Sweet
Williams's Red
Wine
Yellow Bellflower

PEARS.

Apple Pear
Andrews
Bartlett Seedling
Bowdoin
Buffum
Bodin's Seedling
Bloodgood
Bradstreet
Brow's Seedling
Bleeker's Meadow
Cushing
Capsheaf
Cumberland
Columbian
Clap
Catharine
Chelmsford
Cabot
Dix
Dearborn's Seedling
Endicott
Foster's St. Michael's
Fulton
Genesee

Harvard
Huguenot
Heathcot
Johonnot
Lincoln
Lewis
Muscadine
McLaughlin
Naumkeag
Orange Russet
Petre
Pope's Quaker
Pennsylvania
Prince's St. Germain
Seckel
Raymond
Rushmore
Tyson
Washington
Wilbur
Wilkinson
Williams's double bearing
Williams's Early

PLUMS.

Nota Bene, (Corse's)
American Wheat
Brevoort's Purple
Byfield
Bleeker's Gage
Bingham
Bradford Gage
Cruger's Seedling
Dana Yellow
Downing Seedling
Elfrey Prune

Frost Gage
Huling's Superb
Imperial Gage
Jefferson
Lombard
Late Yellow Damson
Pond's Seedling
Rogers's new
Topsfield
Washington
Wilkinson, (new)

CHERRIES.

Arden's White Heart	Hyder Red Heart
Davenport	Plumstone Morello
Downer's late Red	Wilkinson, (new)
Gridley	White Mazard
Fine Red, Manning's)	

Mr. Manning can supply scions of all the above kinds, (where he has not trees,) and cultivators wishing to send American fruits to England or France, have the opportunity to procure them true to the name.—*Ed.*

Notice of a new native apple, called the Hartford Sweet.—I have attended to your request in a late number of your Magazine, (p. 115.) I have seen the owner of the native apple tree. He states that there is no appearance of there having been any orchard near the tree. I have eaten the apples taken from the parent tree, likewise the fruit from a *sucker* from the root: they are alike, except that the fruit from the tree grown from the sucker is the largest and fairest, and keeps the best: there is no trouble in keeping them *juicy* until June. There is no apple with us that is so beautiful and fair; I have very rarely seen one with any blemish upon it.

The fruit is not known in Hartford, only so far as I have introduced it; the family who own the tree have never raised a dozen trees from it. I discovered it about five years since, and I have none yet in bearing on my ground.

I have some other native apples, which I have discovered in this vicinity, and at some future time hope to have the opportunity of sending you some of the fruit.—*E. W. Bull, Hartford, Conn., March, 1840.*

In addition to our request, through our pages, we immediately wrote to our correspondent, to ascertain the origin and history of the tree, in order to be certain respecting its being a native fruit. The above is the answer of Dr. Bull. We have no doubt, from what he states, that it is a seedling, which sprung up where the parent tree now stands; thus affording another instance of the excellence of our native fruits, even when accidentally produced.

Mr. Manning has informed us, that he esteems this apple a most valuable winter variety, being a large and beautiful fruit, (judging from the specimens sent for exhibition at the Massachusetts Horticultural Society's Rooms,) with a red skin, the flesh tender and sweet. Dr. Bull has, subsequently to our re-

ceipt of his note, sent a parcel of scions to the Massachusetts Horticultural Society for distribution among the members. We trust those who received them will make a good report of their success in cultivating the fruit.—*Ed.*

ART. III. *On the cultivation of Annual Flowers; with a description of some of the more recently introduced species and varieties, and a list of the most beautiful and desirable kinds for cultivation.* By the EDITOR.

[Continued from p. 140.]

IN our last number we described several of the more recently introduced annuals, and detailed their mode of cultivation so far as we could do so from our own experience. If the directions are followed, there need be no fear of success.

There are in cultivation a very great variety of annuals; some of the English catalogues contain nearly a thousand names of different species and varieties: many of the varieties are very similar to each other, and some of the species and varieties possess so little beauty that they are scarcely worthy of a place in a small garden, particularly in a choice collection, where it is desirable to produce a brilliant display from a small space of soil. Probably one hundred of the best are as many as would well repay the time and attention bestowed upon them, except in large and extensive flower gardens, such as are seldom found attached to gardens in this country, though not uncommon in England.

It will be our object now, to give a list of such as we think best suited for a good flower garden, arranging the names according to the color of the flowers, the height they attain when under good cultivation, their time of blooming, and any other information which may be peculiar to any particular plant. This, we trust, will facilitate those who are beginners in the cultivation of annuals, in selecting a good variety of colors, planting them according to their heights, and by our giving the period of their blooming, arranging them so as to have a successive show of flowers, the whole summer through. This latter object is scarcely ever attended to; and it is not unfrequent to see a flower border gay and brilliant in June, and in July presenting an appearance little better than if it was filled with weeds. The plants having finished their flowering season, and there be-

ing no others to take their place, the aspect of such a bed is unsightly the remainder of the season. One of the *principal* objects in planting flower beds, is to do it in such a manner that a continued succession of bloom may be afforded from May till October.

In our climate, in the month of May, very few plants will be found in bloom, unless they have been grown from seeds sown in the fall; and the number of kinds which can be brought forward in this manner, is very limited. Early in June, those sown in April and May will commence flowering, and from that period, to the destruction of the plants by severe frosts in the autumn, there will be no time but what a smaller or larger number of varieties will be ornamenting the border.

After enumerating the list of the various kinds, we shall bring this article to a close, by noticing the various methods of laying out, and planting flower beds, generally adopted in England, and add a few observations from our own experience upon the best method of planting so as to attain the desired object,—the most interesting display from a limited space of ground.

WHITE.

Plants six to twelve inches high.

Ice Plant, (*Mesembryanthemum cristallinum.*) Flowering in July and August. This plant is a great favorite in every garden, its singularly beautiful foliage claiming for it a place in almost every flower border. The seeds should be planted in pots early in May, and transplanted into the border about the first of June, and each plant allowed sufficient room to spread its branches. The soil should be light and the situation rather dry.

Sweet Alyssum, (*Alyssum maritimum.*) Flowering from June to October. The sweet alyssum is a tender perennial, but flowers from the seed the first

season, and is therefore classed among annuals. The flowers are highly fragrant. If the roots are taken up in a pot, it will flower well in the house.

White flowered Leptosiphon, (*Leptosiphon androsæceus* var. *alba.*) A new variety with white flowers. Flowering from June to August.

Mr. Walker's Schizopetalon, (*Schizopétalon Walkeri.*) Flowering in July and August; an extremely delicate plant, with small but singularly beautiful white flowers.

Beautiful Blumenbachia, (*Blumenbáchia insignis.*) Flowering from July to September.

One foot to eighteen inches high.

- Common white Candytuft, (*Ibèris amàra*.) Flowers in June and July: to have a succession of flowers, two sowings of the seed should be made, one in April or May, and the other in June.
- Pinnate-leaved Candytuft, (*Ibèris pinnàta*.) Flowers from July till October.
- New rocket Candytuft, (*Ibèris amàra* var.) Flowers in June and July; a new and improved variety, with very large and dense corymbose clusters of blossoms.
- White Venus's Looking-glass, (*Prismatocàrpus speculum àlba*.) Flowers from June to August.
- Mr. Priest's Schizánthus, (*Schizánthus Prièstii*.) Flowers in July and August. We have already noticed this new variety, p. 139.
- Sweet scented Stevia, (*Stèvia serràta*.) Flowering in July and September.
- White evening Primrose, (*Ænothèra tetráptera*.) Flowers from June to October. Very pretty.

Eighteen inches to two feet high.

- White Petunia, (*Petùnia nyc-taginiflòra*.) Flowers from June to October. A showy and handsome annual; the plants should be allowed plenty of room to extend their branches.
- White Clarkia, (*Clàrkia pulchèlla àlba*.) Flowers in July and September; one of the most delicate annuals.
- White Chrysanthemum (*Chrysanthemum coronàrium àlba*.) Flowers in July and September.
- Double white Jacobæa, (*Senecio élégans àlba*.) Flowers in July and September; very pretty.
- Love in a Mist, (*Nigèlla damascèna*.) Flowering in July and September.

Two feet high and upwards.

- White Argemone, (*Argemòne mexicàna*.) Flowers from July to October. Very showy.
- New white Malope, (*Málope trifida àlba*.) Flowers in July and October. New and handsome.
- Winged Ammobium, (*Ammòbium alàtum*.) Flowers from July to October; erect in its habit.
- White Lavatera (*Lavàtera triméstris àlba*.) Flowers from July to October. The plants should not stand too crowded.
- White sweet Sultan, (*Centaurèa moschàta àlba*.) Flowers from July to September.
- New white eternal Flower, (*Xeránthemum bracteàtum àlba*.) Flowering from August to October.
- White Helicrysum, (*Helicrysum macránthum*.) Flow-

ers from July to October;
a new and very elegant va-

riety, with white flowers,
tipped with blush.

YELLOW AND ORANGE.

Six inches to one foot high.

Yellow Chryseis, (*Chryseis californica*.) Flowers from June to October; sow where the plants are to remain, as they do not bear removing with success.

Orange colored Chryseis, (*Chryseis crœcea*.) Flowers from June to October; sow where the plants are to remain to flower; thin out to the distance of six inches.

Procumbent Sanvitalia, (*Sanvitalia procumbens*.) Flowers in June and September; of a spreading, dwarf habit; pretty in patches.

Musk flowered Mimulus, (*Mimulus moschata*.)—Flowering from June to September. This is a pretty little plant for small beds, and desirable from its strong odor of musk.

One foot to eighteen inches high.

Drummond's Coreopsis, (*Calliopsis Drummondii*.)—Flowers from June to October. See p. 132.

New dark Coreopsis, (*Calliopsis* var. *atrosanguinea*.)—Flowers from June to Oct.

Golden Hawkweed, (*Crœpis barbata*.) Flowers in June and August.

Showy Sphænogyne, (*Sphænogyne speciosa*.) Flowers in July and August.

Stem clasping Dracopis, (*Dracopis amplexicaulis*.) Flowers in July and Sept.

Tri-colored Chrysanthemum, (*Chrysanthemum tricolor*.) Flowering in July and Sept.

Drummond's Primrose, (*Oenothera Drummondii*.)—Flowering from June to September. New and very handsome.

Chrysanthemum-like Oxyura, (*Oxyura chrysanthemoides*.) Flowers in July and August. Noticed at p. 132.

Yellow Cladanthus, (*Cladanthus arābicus*.) Flowers from June to October; very pretty; grows well in light, dry soil.

Peroffsky's Erysimum, (*Erysimum Peroffskydnum*.)—Flowering in July and September. Bright orange and very beautiful.

Two foot high and upwards.

Golden Bartonía, (*Bartonia aurea*.) Flowers from July to Oct.; noticed at p. 134.

Golden Coreopsis, (*Calliopsis tinctoria*.) Flowering all summer.

- Bright yellow Zinnia, (*Zinnia parviflora*.) Flowers in July and September.
- Yellow Chrysanthemum, (*Chrysanthemum coronaria*.) Flowers from July to October; requires good soil, and the plants to stand one foot apart.
- African marigold, (*Tagetes erecta*.) Flowers from June to October; should be planted in good soil.
- Yellow sweet Sultan, (*Centaurea suaveolens*.) Flowers in July and August. One of the prettiest annuals cultivated.
- Bright yellow Argemone, (*Argemone speciosa*.) Flowers from July to October. The plants should be tied to stakes, to prevent their being broken by the wind.
- Californian Lasthenia, (*Lasthenia californica*.) Flowers from June to September.
- Elegant Madaria, (*Madaria*, [formerly *Mardia*] *elegans*.) Flowers in July and September. Should be in a rather shady situation, as the sun curls up the flowers.
- Great flowering evening Primrose, (*Oenothera grandiflora*.) Flowering in August and September.
- Yellow Nasturtium, (*Tropæolum majus*.) Flowering from June to September.
- French Marigold, (*Tagetes patula*.) Flowering from June to October.

ROSE.

Six inches to one foot high.

- Many-flowered Catchfly, (*Silene multiflora*.) Flowers in August and September. Noticed at p. 140.
- Rose of Heaven, (*Lychnis coeli rosea*.) Flowers in July and September, in light sandy soil.

One foot to eighteen inches high.

- Drummond's annual Phlox, (*Phlox Drummondii*.)—Flowers from June to Oct. For particulars respecting this species, see p. 135.
- Mangles's Rodanthe, (*Rodanthe Manglésii*.) Flowers from June to September. We have already noticed this fine annual, p. 136.
- Rose-colored Nonea, (*Nonea rosea*.) Flowers from July to September.
- Cluster flowered Catchfly, (*Silene compacta*.) Flowers from June to October. This species does best when the seeds are sown in the fall. The plants come up strong early in April, and in June are in bloom, and continue to display their flowers the whole season. A better soil may be appropriated to this species than the others.
- Elegant rose Clarkia, (*Clarkia elegans rosea*.) Flowers

- in June and September. A new and pretty plant, forming a beautiful object in large masses.
- Tenore's Catchfly, (*Silène Tendrei.*) Flowers in July and September. Like the other silenes, it delights in a light sandy soil.
- Lobel's Catchfly, (*Silène armeria.*) Flowers in July and September.
- Two-color'd Calandrinia, (*Calandrinia discolor.*) Flowers in July and September. We have detailed our plan of cultivating this fine species at p. 133.

RED.*Six inches to one foot high.*

- Chinese annual pink, (*Dianthus chinensis.*) Flowers from July to October. No annual adds more to the beauty of the border than the annual pink, especially if the seeds are selected from choice flowers. They grow freely, flower profusely, and the great variety and blending of colors, in a large bed, is extremely beautiful.
- Virginian Stock, (*Malcolmia maritimus.*) Flowers from July to October.
- Showy flowered Calandrinia, (*Calandrinia speciosa.*)—Flowering in July and September. Delights in a light dry soil in a sunny and fully exposed situation.
- Rose colored Verbena, (*Verbena Aubletia.*) Flowering in July and September.

One foot to eighteen inches high.

- Drooping Catchfly, (*Silène pendula.*) Flowers in July and August, in a light sandy soil.
- Crimson Coxcomb, (*Celosia cristata.*) Flowers from June to Oct. Plants should be forwarded in a frame or hot-bed, and transplanted into a *very rich* soil, to make them produce handsome heads.

Eighteen inches to two feet and upwards.

- Red Lavatera, (*Lavatera triméstris.*) Flowers in July and September.
- Rose-colored branching Larkspur, (*Delphinium consolida rosea.*) Flowers in July and September. Plant in very rich soil, and tie up the stems to neat sticks, as the wind is apt to break them down from the profusion of flowers.
- Red Zinnia, (*Zinnia multiflora.*) Flowers in July and September, in a good soil and open situation.
- American Centaurea, (*Plectocéphalus americanus.*)—Flowers in August and September.

- Vermilion colored Malva, (*Málva miniàta.*) Flowers in July and September.
- Dark red Nasturtium, (*Tropæolum majus* var. *atrosanguinea.*) Flowers in July and Sept. A pretty plant for training up to a trellis or sticks, &c. ; attaining the height, when thus assisted in its growth, of six feet.
- Love lies Bleeding, (*Amarantus caudatus.*) Flowers from July to September.

SCARLET.

One foot to eighteen inches high and upwards.

- Scarlet Cacalia, (*Cacalia coccinea.*) Flowers from June to September. A bed or patch of this pretty flower, with the plants standing close together, has a very showy appearance; one foot high.
- Flos Adonis (*Adonis vernalis.*) Flowers in July and September. The plants may stand close together, as the flowers are not very large, but in masses they make a brilliant show. One ft. high.
- Scarlet Zinnia, (*Zinnia coccinea.*) Flowering from July till frost. This variety when true, is one of the brightest scarlet annual flowers; but unless great care is taken in saving the seeds, it soon degenerates to a dull purple, or into various shades between scarlet and purple. The soil should be very rich and light, and the situation warm and exposed to the sun.
- Crimson Cypress vine, (*Ipomæa Quamoclit.*) Flowers in August and September. A most exquisitely beautiful annual climber.

LILAC AND PURPLE.

One foot to eighteen inches high.

- Elegant Clarkia, (*Clárkia elegans.*) Flowers in July and September.
- Beautiful Clarkia, (*Clárkia pulchélla.*) Flowers from June to September; should be planted in light loamy soil.
- Dense-flowered Leptosiphon, (*Leptosiphon densiflorus.*) Flowers in June and August. Delights in a good loamy soil.
- Great flowered Calandrinia, (*Calandrinia grandiflora.*) Flowers in July and September. Noticed at p. 133.
- Purple Petunia, (*Petunia phœnicea.*) Flowers from June till frost. A light rich soil will suit the plant best.
- Purple Candytuft, (*Iberis umbellata.*) Flowers in June and August.
- Crimson Candytuft, (*Iberis umbellata* var.) Flowers in June and August.
- Double purple Jacobæa, (*Senecio elegans pleno.*)

Flowers in July to September. Plant in good rich soil.

Long tubed *Leptosiphon*, (*Leptosiphon androsæceus*.) Flowering in June and August. Both this and the *L. densiflorus* delight in a good light loam, and a partially shaded situation.

Hooker's *Schizanthus*, (*Schizanthus Hookeri*.) Flowering in July and September. All the *schizanthuses* are beautiful and exceedingly delicate plants. The seeds may be sown in May, in light, loamy soil, and the plants transplanted early in June. A situation not too much exposed to the wind or the full sun should be selected, and the plants should be tied up to neat green stakes as they proceed in growth. Thus treated, they will be great

ornaments of the garden all summer.

Wing leaved *Schizanthus*, (*Schizanthus pinnatus*.) Flowering in July and September.

Graham's *Schizanthus*, (*Schizanthus Grahamei*.) Flowering in July & September.

Dwarf branched *Schizanthus*, (*Schizanthus pinnatus humilis*.) Flowering in June and August.

Lindley's Primrose, (*Oenothera Lindleyana*.) Flowering in July and September.

Veined *Verbena*, (*Verbena venosa*.) Flowers in July and September. The roots of this species, if protected in a frame or cellar during winter, flower very profusely the second season.

Purple eternal Flower, (*Xeranthemum annuum*.)—Flowers in July & August.

Eighteen inches to two feet high and upwards.

Globe *Amaranthus*, (*Gomphrena globosa*.) Flowers from July till frost. Plant in very rich soil.

Purple sweet Sultan, (*Centaurea moschata*.) Flowers in July and September.

Sweet Scabious, (*Scabiosa atropurpurea*.) Flowers in August and September.

Purple *Zinnia*, (*Zinnia elegans*.) Flowers in August and September.

Princes Feather, (*Amarantus hypochondriacus*.) Flowers from July till frost.

Great flowering Malope, (*Malope trifida grandiflora*.)

Large blue Lupins, (*Lupinus pilosus*.) Flowers in July and August.

Barclay's *Maurandya*, (*Maurandya Barclayana*.) Flowers in July and September. A fine climber.

BLUE.

Six inches to one foot high.

Graceful *Lobelia*, (*Lobelia gracilis*.) Flowers from Ju-

ly to September. To plant this delicate annual so as to

have a fine effect, it should be placed on slightly elevated mounds of rich soil. *Lobelia bicolor* is similar to *L. gracilis*.

Elegant Nemophila, (*Nemophila insignis*.) Flowers in July and September.—Plant in a half shady moist situation.

Pretty Clintonia, (*Clintonia pulchella*.) Flowers from July till frost. Noticed at p. 136, together with the *C. elegans*.

Elegant Clintonia, (*Clintonia*

elegans.) Flowers from July till frost. It should be treated in the same manner of *Lobelia gracilis*—to which it is a fine companion.

Atriplex leaved Nolana, (*Nolana atriplicifolia*.) Flowers from June till frost. Noticed at p. 131. This and *Nemophila insignis* are fine annuals for planting in beds on turf.

Fine blue Anagallis, (*Anagallis indica*.) Flowering all summer.

One foot to two feet high.

Mexican Ageratum, (*Ageratum mexicanum*.) Flowers in July and September.

Azure blue Commelina, (*Commelina cœlestis*.) Flowers in July and September.

Azure blue Gilia, (*Gilia capitata*.) Flowers in August and September.

Spanish Nigella, (*Nigella hispanica*.) Flowers in July & Sept. Noticed at p. 130.

Fine blue Eutoca, (*Eutoca viscida*.) Flowers from July till frost. Noticed at p. 139.

Dwarf Convolvulus, (*Convolvulus minor*.) Flowers from June till frost.

Blue Didiscus, (*Didiscus cœruleus*.) Flowers in August and September. For particulars respecting this, see p. 137.

LILAC, PURPLE, OR BLUE, AND WHITE.

One foot to two feet high.

Various leaved Collinsia, (*Collinsia heterophylla*.) Flowering in June and August. Both of these species are very fine annuals. The plants flower more vigorously, if the seeds are sown early before warm weather overtakes the young plants. Select a half shady situation, and plant in good mellow loam.

Two colored Collinsia, (*Collinsia bicolor*.) Flowering in June and August.

Three colored Gilia, (*Gilia tricolor*.) Flowers all summer; one of the most exquisite little annuals cultivated.

Unique Larkspur, (*Delphinium consolida* var.) Flowering from July to September.

VERY DARK.

One foot to eighteen inches high.

- Dark flowered Lotus, (*Lôtus jacobæus*.) Flowering in August and September. A beautiful plant, which may be treated as an annual. The seeds should be sown in April, or early in May, and the young plants removed to the border in June. Its dark, almost black flowers, and small linear foliage, render it a very desirable plant.
- Dark purple Salpiglossis, (*Salpiglóssis atropurpurea*.) Flowering in July and August. A light, loamy soil and half shaded aspect best suits the salpiglossis.

COLORS VARYING.

Six inches to one foot.

- Pansies or Hearts-ease, (*Viola tricolor*.) Flowers all summer. The large flowering varieties are the most beautiful ornaments of the garden all summer.

One to two feet high.

- Double German Asters, (*Aster sinénsis*.) Flowering in August and September. These should be planted in very rich moist soil, and be well watered if the weather should be dry. those from seeds sown in May or early in June, in July and August; and those sown in October, in May. Sow the seeds where the plants are to bloom, as they will not do well transplanted.
- Double Balsams, (*Impatiens balsamina*.) Flowering from July till frost. Transplant into very rich soil. Fine Poppies, (*Papáver somniferum*.) Flowering in July and August.
- Rocket Larkspurs, (*Delphinium ajacis*.) Flowering all summer if successive sowings are made. Plants from seeds sown in April will flower in June and July; Lupins, (*Lupinus* sp. and var.) Flowering in July and August. They delight in a light rich soil.
- Ten-week stock Gilliflower, (*Mathiòla annua*.) Flowering all summer.

Two to four feet high and upwards.

- Marvel of Peru, (*Mirabilis dichótoma*.) Flowers in August and September. Morning Glories, (*Convólulus mājor*.) Flowering in July and September.

Sweet Peas, (<i>Láthyrus odorátus</i> .)	Flowering in August and September.
and September.	Mixed Cyanus, (<i>Centaurea cyanus</i> .)
Tall branching Larkspur, (<i>Delphinium consóida</i> .)	Flower all summer.

There are a great number of other species and varieties, but the enumeration of all of them would occupy more room than we have to spare. In a small garden the above will make as brilliant display as could be desired.

In the planting of annual flowers, the plan generally pursued is to sow the seeds in little circular patches, or drills, in the flower border, wherever a place can be found between the perennial plants. Small beds, neatly laid out, and wholly devoted to the cultivation of annuals, are not very often seen in our present state of gardening. This method, however, is very generally adopted in England, and a smaller or larger space of soil is annually devoted to the cultivation of choice annuals.

There are some objections to planting annuals promiscuously in the border; many of them are of small, slender, and delicate growth, and would be so encroached upon by their more vigorous neighbors, that their beauty would not be fully seen and appreciated, and with many of the dwarf kinds or spreading varieties, there is not generally sufficient room for them to extend their procumbent branches to good advantage. The whole should not be allowed to grow together in one dense mass, but all the plants should be kept distinct from those growing near them, in order that their whole form and beauty may be distinguished at once: this is what may be termed the gardenesque style, applied to the flower garden; that is, allowing every plant room to extend and perfect its branches, without being encroached upon by those standing near it.

No definite rules can be given for laying out the flower garden, as so much depends upon the aspect, situation, soil and other accessories. As a general rule, it should be situated near the house, or in front, or near the conservatory or greenhouse. In the English style of laying out, the flower garden is most frequently placed in front of the conservatory, and is either composed of beds on turf, or with gravel walks, and box, board or some other kind of edging, suitable to keep the earth in its place.

It will not be expected that gardens in general are sufficiently large to admit of setting aside a spot to be devoted particularly to annual flowers; or that but a few persons are so fond

of plants, as to think it worth while to devote so much care to their cultivation; but wherever there is room to do so, a great deal of pleasure may be derived from the cultivation of a choice collection. We have already urged the claims of annual flowers upon the attention of the amateur, and we hope what we shall now offer will tend to induce many who have not fully appreciated their beauty, when growing in scattered groups, to try them planted in beds exclusively by themselves.

Many styles of laying out flower gardens are adopted in England: the geometrical, the English, the Dutch, and the French, each have their admirers. When the flower garden is limited, and the beds are to be laid out of small size, no attempt should be made at a picturesque arrangement, as a bad effect would be produced. A plain and simple plan, either in squares, circles, or arabesque figures, will show to the best advantage.

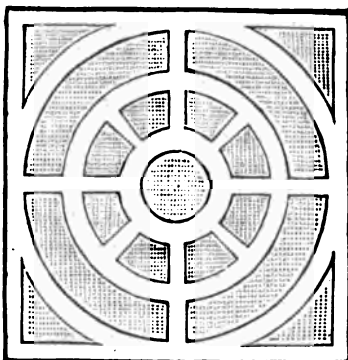
In the two following plans, (*figs. 6 & 7.*) we have shown the manner in which flower gardens may be laid out, either for the cultivation of a miscellaneous collection of bulbs, perennials and annuals, a collection of perennials and annuals together, a collection of annuals and green-house and frame plants turned out of the pots into the soil, or for a collection of annuals alone. The situation decided upon should be, if possible, near to or in front of the green-house or conservatory, or, if there are neither of these attached to the garden, near to the house, where it can be seen from the drawing-room or library; but, as in most gardens, there is space afforded in front of the green-house, that is certainly the best place. Its size may be regulated altogether by the taste and desire of the owner; it may be the full length of the conservatory and in the form of a parallelogram, or it may be exactly a square, or its form may be regulated by the space, aspect, &c.

In the two plans annexed, we have supposed the flower garden to be situated directly in front of the green-house, and to be just the same length, (thirty-two feet, the ordinary length of a common sized house,) and width; the beds should be laid out with care, as on their precision much of their beauty depends: the beds may be surrounded with box edging, and gravel walks between, or they may be edged with what we have found to answer a good purpose, Iceland moss. This forms a perpetual green, and, if kept neatly trimmed, is full as desirable an edging around such common beds as the box: supposing this to be all completed, we next come to the planting of the beds. This, as we have just observed, may be devoted wholly to annuals, to annuals and perennials, and to both, with the ad-

dition of tender plants, such as verbenas, &c. &c.; but we shall at present speak of them as only to be filled with annuals.

The first plan, (fig. 6,) may be planted as follows:

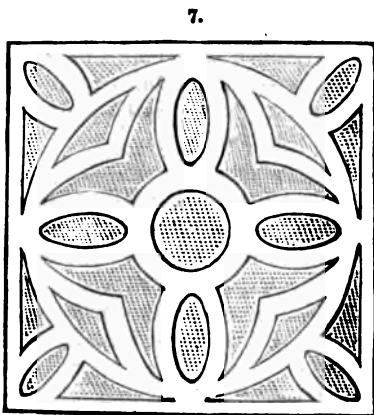
In the centre circular bed may be planted marigolds, Marvel of Peru, tall branching larkspurs, and German asters, placing the tallest in the centre; or a dahlia or two may be planted in the same place, and on the outer edge a few dwarf plants may be planted; the eight small beds next to this may be planted with a miscellaneous collection of sorts, growing



from a foot to two feet high, placing the dwarfest at the outer edge of the bed; the four larger beds next, may be also planted with miscellaneous kinds, growing about a foot high; and the four corner beds may be planted with very dwarf or trailing sorts, such as the nemophilas, nolas, *Lobelia grácilis*, *Clintonia pulchélla* and *élegans*, *Chryséis crócea*, *Silène multiflora*, pansies, &c.

The second plan (fig. 7,) admits of a greater display of plants, and, in particular, when it is desirable to have them in masses of one color, viz:

the centre may be wholly planted with the finest double German asters in mixed colors: two of the four oval beds, those opposite each other, may be planted with *Clárkia élegans*, *C. élegans rósea*, and *C. pulchélla*, placing the latter at the outer edge; and the other two with rocket larkspurs in mixt colors, to be succeeded with German asters, brought forward and reserved for the purpose.



Two of the four large beds between the oval ones may be planted with *Chryséis crócea* and *califórnica* mixed, and the other two with crimson and white

petunias mixed together: the four small beds may be filled with *Lobelia grácilis*, *Clintonia elegans*, *Nemóphila insignis*, and *Nolana atriplicifolia*, each kind in each separate bed, and the two latter opposite to each other. Two of the oval figures in the corners may be planted with *Málope grandiflora*, and the other two with white and purple candytufts in mixture. Four of the smaller corner beds may be sown with mignonette, and the other four with sweet allysum, which will fill the garden with their combined and delicious fragrance. If the plan of planting in masses is not approved of, a miscellaneous assortment may be sown, as recommended in the first plan, (fig. 6,) being careful to place the tallest plants in the centre bed, and diminishing in size to the outer bed.

We might add much more, to shew the great variety which may be introduced into these beds; but these we consider sufficient to guide the new beginner in making a pleasing arrangement: much must be left to the taste of the amateur, who will, after a year or two, detect what is wanting in his first attempts at planting. With the annexed list of annuals, giving the heights and colors, we believe there is no necessity of extending our remarks any farther at this time.

ART. IV. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1s. each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Botanical and Floricultural Intelligence.—Mr. Nuttall has been delivering an interesting course of lectures on botany, in Boston, before the Lowell Institute, at the Odeon. The lectures have been fully attended, and we hope they may be the means of awakening attention upon the science of botany. Mr. Nuttall, though not a popular lecturer, is a thorough botanist, and those who have listened attentively to his remarks, must have been highly gratified and instructed. It was our intention to have given a brief synopsis of each of the lectures, but we have been prevented from doing so from other engagements.

Synonyms of some of the North American Orchidææ.—Dr. Asa Gray, since his return from Europe, last autumn, has communicated, in *Silliman's Journal*, for March, 1840, an article upon the "Synonyms of several North American Plants, of the *Orchis* tribe." The information is somewhat important to botanists, as it completely sets at variance all the opinions respecting the true character of the various species heretofore included under the genus *Orchis* and *Habenaria*.

The genus *Orchis*, Dr. Gray remarks, as at present constituted, although belonging to temperate regions and to the northerly hemisphere, is almost wholly confined to Europe, and is represented in North America by a single species. Excepting this, all our Linnæan and Willdenovian species belong to *Habenaria*, as characterised by Brown, and to *Platanthera* and *Peristylis* of Lindley. Dr. Gray examined a great number of herbaria, and the opinions upon which these and other species were founded, and he states that he was surprised to find such confusion in the synonymes. Some of our commonest species have been widely mistaken from the time of Linnæus to the present day.

Linnæus describes only four North American species of *Orchis*, viz : *O. ciliaris*, *flava*, *psycodes* and *spectabile*. *O. ciliaris* is the *Platanthera holopétala* of Lindley, and *spectabile* is still retained in the genus. *O. flava* is the *Habenaria flava*, and *O. psycodes* is the *Habenaria psycodes*. In reference to the latter, Dr. Gray remarks as follows:—*Orchis psycodes* Linn. So great is the confusion of the synonyme, and so extensive the series of mistakes in regard to this species, that it becomes at first sight questionable whether the Linnæan name should not be altogether dropped. But, as the description of Linnæus is perfectly applicable to the species he had in view, and to no other, we are not at liberty to pass by the original name, still less to apply it to plants subsequently mistaken for this species. The *O. psycodes* is described from a plant collected

in Canada, by Kalm, which is still preserved in the Linnæan herbarium. This plant, Dr. Gray found to be not the *O. lácera* of Michaux, as is generally supposed, but the *O. fimbriàta* of Aiton, and succeeding authors. The *O. incisa* and *O. fissa* of Muhlenberg and Wildenow are identical with the original *O. psycòdes* of Linnæus : that is, are the ordinary and smaller flowered forces of *O. fimbriàta*. *O. grandiflòra*, described by Bigelow as a new species, is the *O. fimbriàta* of Wildenow. The original name of Linnæus will now have to be restored, and, according to the division by Brown, it will be the *Habenària psycòdes*.

We have thus only alluded to the error in this species, as all botanists will read Dr. Gray's paper on the subject. The *O. psycòdes* is one of our most beautiful plants ; and, as much attention is likely to be given to our native species, we have thought that the above explanation might be useful to cultivators generally. It will remove at once the doubts which have been raised respecting the *O. grandiflòra* of Bigelow, and the *O. fimbriàta*, the former having been supposed to be a different plant, and specimens were sent for exhibition, to the Massachusetts Horticultural Society, last season, by Mr. Oakes of Ipswich, under the name of *O. grandiflòra*, which, we believe, were seen by Dr. Bigelow himself. The mistake seems to have only arisen from a more vigorous state of the specimens from which Dr. Bigelow's description was drawn up.

Dr. Gray gives all the synonymes, as detected in herbariums, which he examined, of *Habenària peremæna*, *H. lácera*, and *H. cristàta*.

Mr. Walker's Tulip Show.—Before our next number sees the light, Mr. Walker's Tulip Show will be in full perfection. The season is at least a fortnight earlier than the last, and bulbs of all kinds are very much advanced. We have not seen Mr. Walker's, but, judging from bulbs in our own garden, we should think the tulips would open by the 20th or 25th of May.

It will be recollected that last fall we stated the show would take place at the public garden in Boston, Mr. Walker having made arrangements with the proprietors, to plant his roots in their grounds. The facility which it will afford to the inhabitants of the city, and strangers who may be here on a visit at this season, of inspecting the exhibition, will, we doubt not, be advantageous to Mr. Walker and the proprietors, and convenient to themselves. The bed is planted out in the same manner as heretofore, and will be conducted in the same manner, and the plants will probably remain in bloom nearly a month. Mr. Walker has published a catalogue of the tulips in his collec-

tion, with the prices attached, and an opportunity is thus afforded for purchasers to examine the flowers when in bloom, and select such as may suit their fancy. We shall be glad to learn that this annual exhibition has been the means of awakening a taste for the tulip, and that we may see it more frequently attracting the attention of the amateur cultivator and florist.

Técoma jasminoides has flowered beautifully in the collection of Mr. Cushing. We have already noticed this plant, (Vol. IV. p. 60,) and our friends, upon whose judgment we can rely, inform us that it fully comes up to the glowing description which we gave of the flower. As a hot-house, or perhaps green-house climber, it is one of the most beautiful plants lately introduced.

Didiscus, (formerly *Trachymène*), *new sp.*—A beautiful new annual species of this elegant genus, has lately been raised from seed received from New Holland, by Messrs. Low & Co., of the Clapton Nursery, near London. It is just like the *cærùlea* in its habit, but has beautiful pink flowers. It is as easily treated as the *D. cærùlea*, and, like that, will prove a splendid addition to the flower garden.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Pennsylvania Horticultural Society.*

The stated meeting of the Society was held at its Hall, this evening, March 17, 1840, the President in the chair.

The Committee on Plants and Flowers reported, that the successful competitor for the premium for the best ten varieties of *Camellia japonicas*, was Robert Buist. The varieties he presented were the *alba pleno*, *conspícua*, *Flòyis*, *imbricatà*, *Landréthii*, *myrtifolia*, *Pæoniflòra*, *picturatà*, *spicatà*, and a seedling of perfect form, and delicate rose color.

And that he also obtained the premium for the best American seedling *Camellia japonica*, which in form was similar to the *Welbánkii*, but larger, and of a white, with two or three stripes of rose color; which has bloomed this season for the first time.

And to the same competitor was awarded the premium for the most interesting display of plants in pots, exhibited this evening.

And for the best Bouquet, the premium was awarded to Andrew Dryburgh.

The Committee also decided that Robert Kilvington was entitled to an honorary premium of one dollar, for a fine display of plants; and John Sherwood, a premium of like amount for a fine Bouquet.

The Committee on Vegetables reported that the premium offered

for the best six heads of Forced Lettuce, was due to Joseph Cook, gardener to William Norris; and to the same contributor, that, for the most interesting display of vegetables.

The Committee desired that honorable record should be made of eight heads of exceedingly fine Lettuce, grown without artificial heat, from the garden of Dr. Wetherill, of Meadow Grove, Montgomery County; exhibited by Gregory Lee, his gardener.

The Committee on Plants and Flowers, reported their award of the premium offered for the best ordered and conducted green-house collection of plants, with observations; as follows:

The Committee on Plants and Flowers, of the Pennsylvania Horticultural Society, agreeably to their annual custom, and in accordance with the rules of the Association, respectfully report:—

That on the 28th and 29th of last month, and 2d of this month, (March,) they visited some of the principal green-houses in this city and vicinity, viz: those of George Pepper, Esq., Messrs. John B. Smith, Alexander Parker, Robert Buist, Mrs. Hibbert, General Robert Patterson, Messrs. Peter Mackenzie, A. Dryburgh, John McArran, Dr. Wood, Messrs. Richard Price, Thomas Landreth, Colonel Carr, (Burrum's,) Messrs. Hirst & Dreer, the Alms House, Messrs. Ritchie & Dick, William Camac, William Norris, Joshua Longstreth, Mrs. Stott, Miss Gratz, Messrs. Robert Kilvington, John Sherwood, Daniel Maupay, and Daniel McAvoy. Your Committee feel great pleasure in stating that there has been a very decided improvement in the general arrangement and keeping of this department of horticulture since they paid their visit last year; and now that the gardeners have so generally attended to this matter, your Committee fondly hope that each successive year may see a corresponding improvement, which will not only benefit the collections of plants, be a source of pleasure to the visitors, but also, in a pecuniary point of view, beneficial to the proprietors.

The Committee have deemed it proper to give a short account of those green-houses, which, in their opinion, deserve notice from the fact of their improved appearance and the general good order in which they are kept.

That of Mr. George Pepper, under the care of William Chalmers, Jr., is decidedly the handsomest and best attended to of any that your Committee have visited, and reflects great credit on the gardener for his care and attention. The camellia house was filled with a valuable collection of plants, all in full bloom, and presented one of the most gratifying sights to the admirers of Flora. This green-house did not come into competition this season, having obtained the premium last year.

Mr. John B. Smith has a fine collection of seedling Camellias and Cacti, particularly of the Mammillaria and Melocactus tribe; his plants are in a healthy condition, though not very numerous, owing to his having disposed of nearly all his stock last spring.

Mr. R. Buist's green-houses are in fine order, and the plants in very healthy condition; his collection of camellias is very large, diversified, and in full bloom; the collection of geraniums very extensive and very thrifty. The Gamboe Plant, from Calcutta seeds, presented to the Society by Dr. Parrish, is a very rare plant, and is in fine condition. Mr. Buist has also a fine specimen of the *Euphorbia Jacquiniflora*, which has been in bloom nearly three months. The houses and plants at his lower nursery are in superior order, and much credit is due to James Powell, who has had them under his care.

Mrs. Hibbert contemplates erecting, this season, a fine range of green-houses—those which she now occupies being too contracted. Her plants have been well attended to, and are in very healthy condition. She has a very fine collection of seedling camellias, some of which were in bloom.

General Patterson's green-house was the next best to Mr. Pepper's that your Committee visited *in the city*; and his gardener, William Sinton, deserves much praise for the taste exhibited, and the general neatness and healthy condition of the plants.

On the premises of Mr. Peter Mackenzie, one double green-house has been added since the last visit of your Committee. The plants are generally healthy and in very good condition; his seedling azalea is a very splendid one. He has some fine seedling plants of *Primula vèris* distinctly edged with yellow; others with a feathered edge.

Mr. McArran has made an addition, this season, of a fine house of sixty feet in length; his plants, generally, are in good health, and houses in remarkably clean order. Among the plants, we saw two large and fine specimens of the double white camellia, and the finest hybrid rhododendron, in full bloom, to be found in the city or vicinity.

An additional house has been also added to Mr. A. Dryburgh's establishment, since last year; and there has been a decided improvement in the health and general condition of his plants.

Dr. Wood's green-house contains a fine collection of medicinal plants in good healthy order.

Your Committee have much pleasure in noticing the improved appearance of Mr. Landreth's green-houses, and the general healthy condition of the plants.

Messrs. Hirst & Dreer deserve, in the opinion of your Committee, considerable credit for the improvements made in so short a time after their commencement; their plants look well and are in good order.

Messrs. Ritchie & Dick have a large collection of healthy plants, and have added a new house since last season, and increased their variety of plants considerably.

Mr. William Norris, Turner's Lane, has erected a very neat green-house, being part of a contemplated range, which, when completed, will add much to the beauty of his premises; the plants are in very good order and well kept, and reflect much credit on his gardener, Joseph Cook.

Mr. Joshua Longstreth is just finishing an extensive graperies of ninety feet in length, on the very best construction, and in the neatest manner. His plants are in very excellent condition, and his green-house is kept in fine order.

To William Chalmers, Sen., gardener to Mrs. Stott, your Committee have awarded the premium of *twenty dollars for the best ordered and conducted green-house collection of plants*.

Mr. Robert Kilvington has a very fine collection of plants, very healthy, and in excellent condition. Your Committee noticed with much pleasure his fine collection of native plants in full bloom. This gentleman takes much pleasure in cultivating indigenous plants, and deserves great credit for the pains he takes in bringing them forward.

Mr. Sherwood has a very large collection of plants, and has made extensive additions to his green-house since last season.

Mr. McAvoy has a very handsome collection of azaleas; there is a very decided improvement in his green-house, and his plants generally are in very good order.

Before closing their report, your Committee would respectfully suggest to the Committee on the Premium List for 1841, the propriety of awarding *two* premiums for the best ordered and well conducted green-houses, viz : *One for the Amateurs, the other for the Practical or Commercial Gardeners.*

All of which is respectfully submitted : Thomas C. Percival, John McArran, Edwin M. Mather, Peter K. Gorgas, *Committee.*

The following resolution proposed by the same Committee, was unanimously adopted:—

The Committee on Plants and Flowers beg leave to offer the following resolution for the consideration of the Society; but, previous to their doing so, they would respectfully make the following remarks.

It is apparent to them, under the existing rules of the Society for their government, that they cannot do justice to the different competitors who are in the habit of exhibiting collections of plants and bouquets on the evening of the stated meetings. One principal reason for this arises from the fact of their being empowered to award only two premiums, viz., for the best display of Plants in pots, and the finest Bouquet. Now as it respects the former, it is very evident that the person who has the most extensive and valuable collection of plants cannot fail, by a judicious selection, to be the successful competitor at every monthly exhibition; and those, whose collections are smaller and less valuable, though probably entitled to as much credit as the former in the culture of them, are doomed to continual disappointment; notwithstanding the pains they may have been at in contributing their quota to the general collection. It is under these views your Committee submit the following, viz:

Resolved, That so much of the Premium List, for the year 1840, as relates to the awarding of premiums for the best display of Plants and Flowers, on the evenings of each stated meeting, be so amended as to authorize the Committee thereon to award, in addition, the following premiums, viz., for the *second* best display of plants in pots, one dollar; for the *third* best display of plants in pots, one dollar; and for the *second* best bouquet, one dollar; also for the *best* display of indigenous plants in pots, two dollars. No person to whom the greater premium has been awarded, can be entitled to the lesser one.

George Pepper, Thomas C. Percival, Edwin M. Mather, John McArran, Peter K. Gorgas, *Committee.*

Seeds presented.—By Miss Percival : a package containing a variety of fine culinary vegetable seeds from Bremen, Germany. Also, by John Vaughan, some Pigeon peas, (*Cytisus cajan*), from the West Indies, and a number of Calcutta flower seeds, which the Committee on the Distribution of Seeds, distributed to members, requesting them to report success.

Books presented.—Buist's *American Flower Garden Directory*, last edition, by the author. McMahon's *American Gardener's Calendar*, ninth edition, by Mrs. McMahon, widow of the author; and *Bache's Report on Education in Europe*, by Algernon S. Roberts.

Members elected.—Mrs. Caleb Cope, Rev. William Prescott Hines, Rev. Dr. Charles Williams, and Joseph K. Breck.

Plants in bloom.—By Robert Buist; *Alonsda elegans*, *Azalea indica* var. *alba*, *A. i. var. coccinea*, *A. i. var. elegans*, *A. i. var. Gillinghami*, *A. i. hybrida*, *Boronia serrulata*, *Camellia japonica* var. *alba pleno*, *C. j. var. althæaeflora*, *C. j. var. Colvillii*, *C. j. var. ex-*

célsa, C. j. var. *Hendersóni*; C. j. var. *imbricatà*, C. j. var. *myrtifolia*, C. j. var. *Pæoniiflora*, C. j. var. *ròsa sinensis*, C. j. var. *rose waratah*, *Choròzema cordatum*, *Cinerària elegans*, C. *populifolia*, *Coronilla glauca*, *Deutzia scabra*, *Diósma capitata*, *E'pactria impressa*, *Erica bimaculatà*, *E. Kennédya*, *E. Pínea*, *Euphòrbia Jacquinæflora*, *E. splendens*, *Lechenaúltia formòsa*, *Mathiola incana*, *Pelargòonium Comptònia*, *Rhododéndron arbòreum hybridum*, and *Grevillea punicea*, *Rhododéndron ròseum*, *R. álbum*; the last three plants are of recent introduction; these rhododendrons are really magnificent plants, and add much to the splendor of our floral collections; they are distinct from the *R. arbòreum*.

By George Pepper; *Caméllia japónica* var. *álba plèno*, C. j. var. *elàta*, C. j. var. *concinna*, C. j. var. *conspicua*, C. j. var. *fimbriatà*, C. j. var. *sùlgens*, C. j. var. *incarnatà*, C. j. var. *myrtifolia*, C. j. var. *speciosa*, C. j. var. *Welbánkii*.

By Peter Mackenzie; *Caméllia japónica* var. *Donckelaéri*, C. j. var. *Landréthii*, C. j. var. *punctatà*, C. j. var. *ròsea*, C. j. seedling, *Cinerària Kingii*, *Erica cerinthoides*, *E. pubescens*, *Lechenaúltia formòsa*, *Ròsa triumphe de Luxembourg*, *Verbèna Binneyana*, several seedling hyacinthi, narcissi, and polyanthi, and four seedling azaleæ, one particularly fine; the flower is of larger dimensions than any grown, and of a rosy carmine color.

By Mrs. Hibbert; *Azàlea indica*, A. i. var. *álba*, A. i. var. *phœnicea*, A. i. two fine seedlings, *Caméllia japónica* var. *conchiflora*, C. j. two good seedlings, *Cántua coccinea*, *Illicium floridànum*, *Lantàna mutabilis*, *Mahérnia odorata*, *Plumbàgo capensis*, *Verbèna álba*, *V. Eyreana*, *V. ignescens*, *V. Pépperi*, *V. Tweedieana* and *Rhododéndron hybridum*, a large and splendid plant in profuse bloom.

By Robert Kilvington; *Azàlea indica* var. *álba*, A. i. var. *phœnicea*, *Blètia Tankervilleæ*, *Cássia armata*, *Cheiránthus cheiri*, *Cinerària bicolor*, C. *cruenta*, C. *lanata*, *Convallària majàlis*, *Diósma álba*, *E'chium càndicans*, *Erica tenella*, *Eupatòrium elegans*, *Heliotròpium peruvianum*, *Lychnis Floscùculi*, *Ornithógalum niveum*, *Pétunia purpùrea*, *Pelargònia*, *Richárdia æthiòpica*, *Ruèllia formòsa*, *Tritònia crocatà*, T. *pàllida*, *Verbèna álba*, *V. Drummòndii*, *V. incisa*, *V. Tweedieana*, *V. Watsoni*, and indigenous plants; *Houstonia cœrulea*, *Trillium erectum*, T. *grandiflorum*, *Viola blanda*, and *V. lanceolatà*.

By Joseph Cook, gardener to William Norris; *Amaryllis Johnsoni*, *Caméllia japónica* var. *Landréthii*, *Cinerària cruenta*, *Cyclamen persicum*, *Pétunia purpùrea*, *Pelargònia*, *Pæonia arborea*, *Richárdia æthiòpica*, and *Verbèna chamædrifolia*.

By Alexander Parker; *A'loe grandiflora*, *A. língua*, *Azàlea indica* var. *álba*, A. i. var. *elegans*, A. i. var. *purpùrea*, *Caméllia japónica* var. *álba plèno*, C. j. var. *rùbra plèno*, C. j. var. *speciosa*, C. j. var. *variegatà*, C. *maliflora*, *Cánna indica*, *Cheiránthus cheiri*, *Cydònia japónica*, *Hawóρθia retùsa*, *Mesembryánthemum*, *Pæonia arborea*, *Rhipsalis salicornoides*, *Richárdia æthiòpica*, *Sálvia splendens*, *Sempervivum arbòreum*, *Sparmànnia africana*, *Verbèna Arrandiàna*, *V. Eyreana*, *V. incisa*, *V. Tweedieana* and *Viburnum lucidum*.

Vegetables.—By Joseph Cook; Radishes and Lettuce.

By Hirst & Dreer; very fine cucumbers, of the Walker's long green and Royal George varieties; unusual at this season.

By Robert Kilvington; a large dish of fine Mushrooms.

Articles.—By Andrew London; The Circular Flower-stand before exhibited, somewhat improved; the feet are set on castors, and the cir-

cular top of three elevations for flower pots, revolves by means of small wheels upon that part to which the feet are attached, and is of such construction that any portion can readily be brought to view. (*Society's Report.*)

ART. II. *Massachusetts Horticultural Society.*

Saturday, March 7th, 1840—Exhibited. Fruits:—From William Oliver, 'Echasserie Pears. From Mr. Wright, Catillac Pears. From S. Downer, Roxbury russets, golden russets, Wales and old Pearmain apples: also Iron pears. The specimens of the Wales apple, which appears to be something like the pearmain, especially in its size and color, were very fine. It would give us much pleasure to procure some authentic account of the origin of this variety; and if this paragraph should meet the eye of any one who can give us any information respecting it, we would feel greatly obliged to the writer. From C. Newhall, 'Echasserie and Royal d'hiver pears.

March 28th—Exhibited. A collection of pausies, from S. Walker.

The Committee on Flowers held a meeting according to adjournment, this day. The sub-committee appointed at a former meeting, to draft rules and regulations for the government of the Exhibitions of this Society through the year, submitted a lengthy report, which was read to the meeting: after some discussion upon its merits, it was referred to the same committee, with instructions to draw up definite rules and regulations for the final action of the Committee: the same to be reported at the next regular meeting of the Society on Saturday, April 18th. Mr. S. Sweetser was added to the sub-committee.

We were glad to find that a majority of the Committee were in favor of the report submitted. It proposes rules for adoption which will essentially change the present useless system of exhibiting plants for premiums. Heretofore, from the want of some proper and governing rules, the premiums have been distributed with but little regard to merit; and zealous cultivators have been so well aware that it was useless to compete where there was so little chance of a fair and just decision of the prizes, that they have refrained from contending for scarcely any of the premiums. The prizes may have been advantageous in inducing some cultivators to present a greater variety of plants and flowers for exhibition; but they have not called out any new, or very few superior specimens, requiring skill in cultivation, which should be the object of such premiums. We shall have occasion, when the report is finally adopted, to continue our remarks further upon this subject, and we would call the attention of all friends of horticulture and of the interests of the Society, to the committee's report, which will appear in our next number.

April 25th.—A stated meeting of the Society was held this day.

Exhibited. Flowers:—A variety of cut flowers, from T. Lee, Esq.

Vegetables:—Fine specimens of Southgate cucumbers, from W. G. Stearns, Esq., Cambridge.

The Committee on Fruits held a meeting this day, and voted that the following premiums be awarded for the ensuing year:—

APPLES —For the best Summer Apples, not less than one dozen, a premium of .		\$5 00
For the best Autumn Apples, not less than one dozen, a premium of .		5 00
For the best Winter Apples, not less than one dozen, a premium of .		5 00
PEARS —For the best Summer Pears, not less than one dozen, a premium of .		5 00
For the best Autumn Pears, not less than one dozen, a premium of .		5 00
For the best Winter Pears, not less than one dozen, a premium of .		5 00
CHERRIES —For the best Cherries, not less than one quart, a premium of .		5 00
For the next best, not less than one quart, a premium of .		4 00
PEACHES —For the best Peaches, open culture, not less than one dozen, a premium of .		5 00
For the next best, not less than one dozen, a premium of .		4 00
For the best Peaches, under glass, not less than one dozen, a premium of .		5 00
PLUMS —For the best Plums, not less than one quart, a premium of .		5 00
For the next best, not less than one quart, a premium of .		4 00
GRAPES —For the best Foreign Grapes, under glass, a premium of .		10 00
For the best Foreign Grapes, open culture, a premium of .		5 00
For the best Native Grapes, a premium of .		5 00
APRICOTS —For the best Apricots, not less than one dozen, a premium of .		5 00
NECTARINES —For the best Nectarines, not less than one dozen, a premium of .		5 00
QUINCES —For the best Quinces, not less than one dozen, a premium of .		5 00
GOOSEBERRIES —For the best Gooseberries, not less than one quart, a premium of .		5 00
RASPBERRIES —For the best Raspberries, not less than one quart, a premium of .		5 00
STRAWBERRIES —For the best Strawberries, not less than one quart, a premium of .		5 00
For the next best, not less than one quart, a premium of .		4 00
CURRANTS —For the best Currants, not less than one quart, a premium of .		3 00
MELONS —For the largest and best Water-Melon, a premium of .		3 00
For the best Musk-Melon, a premium of .		3 00
The Committee also offer the Welles' Premiums for Apples, the produce of seedling trees, which shall have been brought into notice since the year 1829, viz.		
For the best Summer Apples, as above, not less than one dozen, a premium of .		\$25 00
For the best Autumn Apples, as above, not less than one dozen, a premium of .		25 00
For the best Winter Apples, as above, not less than one dozen, a premium of .		25 00

The Committee will determine the days, on which the Welles' Premium shall be awarded, of which due notice will be given.

By a vote of the Society, no premiums shall be awarded to any but members of the Society; but gratuities may be given to others upon the recommendation of the Executive Committee. For the Committee, *E. M. Richards, Chairman.*

ART. III. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Squashes, per cwt:			
Chenangoes, } per barrel,	1 25	1 50		Winter crook neck,.....	5 00	5 00	
} per bushel,	50	—		Autumnal Marrow,.....	4 00	6 00	
Common, } per barrel, ..	1 00	1 25		Canada crook neck,.....	5 00	6 00	
} per bushel, ..	50	—		West India,.....	2 50	3 00	
Eastports, } per barrel, ..	2 25	2 50		Pumpkins, each.....	20	25	
} per bushel, ..	1 25	1 50					
Turnips:							
Common, per bushel,.....	37½	50					
Ruta Baga, per bushel,...	37½	50					
Onions:				<i>Fruits.</i>			
New white, per bunch,...	5	6		Apples, dessert, new:			
Red, per bunch,.....	3	4		Common, } per barrel,...	2 50	3 00	
White, per bunch,.....	2	3		} per bushel,...	1 00	—	
Yellow, per bushel,.....	50	62		Russets, } per barrel,.....	3 50	4 00	
Beets, per bushel,.....	62½	75		} per bushel,...	1 50	—	
Carrots, per bushel,.....	62½	75		Baldwins, } per barrel,...	4 00	5 00	
Parsnips, per bushel,.....	75	1 00		} per bushel,...	1 50	—	
Horseradish, per pound,...	10	12		N.Y. pippins, } pr barrel,	3 00	3 50	
Radishes, per bunch,.....	—	—		} pr bushel,	1 50	—	
Scarlet short-top,.....	10	12		Greenings, per barrel....	3 50	4 00	
Scarlet turnip,.....	8	10		Pearmains, per barrel,...	—	—	
Shallots, per pound,.....	20	—		Sweet, per barrel,.....	3 00	3 50	
Garlic, per pound,.....	12	—		Lady Apples, per bushel,.	—	—	
<i>Cabbages, Salads, &c.</i>				Dried apples, per pound,.	8½	9	
Cabbages, per dozen:				Pears:			
Savoy.....	50	75		St. Germain, per doz....	—	—	
Drumhead,.....	75	1 00		Baking, per bushel,.....	2 00	2 50	
Red Dutch.....	50	75		Grapes, per pound:			
Lettuce, per head,.....	4	6		Black Hamburg,.....	—	—	
Tomatoes, per dozen,...	—	—		Malaga,.....	—	—	
Spinach, per half peck,...	6	—		Cucumbers, each,.....	25	37½	
Dandelions, per half peck,...	6	—		Cranberries, per bushel,...	2 50	3 50	
Cabbage sprouts, per peck,...	17	20		Lemons, per dozen,....	20	25	
Turnip-tops per peck,.....	12½	—		Oranges, per dozen:			
Rhubarb, per pound,.....	10	—		Sicily,.....	20	25	
Asparagus, per bunch,....	12½	—		Havana, (sweet).	25	37½	
<i>Pot and Sweet Herbs.</i>				Pineapples, each,.....	25	37½	
Parsley, per half peck,....	25	—		Cocoanuts, each,.....	5	6	
Sage, per pound,.....	17	20		Chestnuts, per bushel,....	4 00	4 50	
Marjorum, per bunch,....	6	12		Walnuts, per bushel,....	1 75	2 00	
Savory, per bunch,.....	6	12		Almonds, (sweet,) per pound,	—	—	
Spearmin, per bunch,....	6	—		Filberts, per pound,....	4	—	
				Castana,.....	4	—	
				English walnuts, per lb....	5½	6	

REMARKS.—The month of April has been mild and pleasant up to the present time, and the last few days remarkably warm for the sea-

son. Peach and cherry trees are now in full bloom, a circumstance which, we believe, has not occurred in April for the past five or six years or more. The season promises well and early, and, if no hard frosts occur to cut off early crops, the market will be well supplied, at an earlier period than usual, with a fine stock of vegetables. Planting has been commenced in good earnest, and peas sown in March have advanced rapidly the last week or two.

Since our last, the stock of potatoes has been somewhat reduced by large shipments to the south; this, together with but few arrivals from the east, has created a more brisk demand, and though prices have not advanced, they may be considered as very firm at our quotations; the only exception to be made is in Eastports, prices of which have fallen off considerably. Turnips very abundant. Onions a complete drug, except whites; some few bunches of new whites came to hand this week. Beets, carrots and parsnips have slightly advanced. Radishes abundant, and of very superior quality. Cabbages, from the decreased supply, are higher. Lettuce plentiful, and very fine. Celery all gone. Spinach and dandelions in great abundance; prices have not averaged so low for the last five or six years. Cabbage sprouts and turnip tops have come to hand. Asparagus has been received, which is earlier by a week than for several seasons. Parsley and spearmint, the latter of which is much called for now, are abundantly supplied. The stock of squashes is nearly gone, very few, except West Indias, remaining; of these there have been several recent arrivals, and prices have fallen: the quality, however, is not very good; they do not appear to have fully ripened.

The market for fruit is rather dull; apples are no higher, with the exception of very choice and handsome Baldwins, which command a slight advance. Pears are most gone. Cranberries, from the arrival of those of spring picking, are lower. Cucumbers have been received nearly the whole of the month, and are readily taken at quotations. A small lot of good pine-apples arrived last week. Oranges, a drug; the arrivals of large quantities, and in poor order, have glutted the market. The season promises well for fruits thus far, and if no frosts occur, there will undoubtedly be a heavy crop.—*M. T., Boston, April 28, 1840.*

HORTICULTURAL MEMORANDA

FOR MAY.

FRUIT DEPARTMENT.

Grape vines, in the green-house or grapery, will now be in flower: keep up the temperature while they remain in bloom, and the fruit will set better. Omit syringing the vines till the fruit is well set. Plants in pots should be well watered.

Strawberry beds may yet be made: the old beds should be top-dressed, and, if the weather proves dry the latter part of the month the beds should be watered.

Raspberry plants should be tied up to stakes, and the ground manured and dug between the rows.

Gooseberry bushes will need attention: if not yet pruned, let them be attended to immediately. Look out for insects.

Peach and other fruit trees, on walls or trellises, should be carefully attended to. Nail in all the new wood in regular order.

Vines, in the open air, should have their shoots tied up to the trellis or wall.

FLOWER DEPARTMENT.

Dahlias will now be growing, and if they are wanted for early flowering they should be potted, and finally set out after the 20th. It is not safe to plant earlier, as a slight frost would cut off the shoots. Enrich the soil, and let it be well dug.

Erythrina Crista galli.—Roots of these splendid plants, wintered in the cellar, may be planted out about the 25th of the month.

Annuals should be sown this month. We have found, after several years' planting, that the safest period is between the 10th and 25th of the month: there is danger in planting many of the more tender sorts earlier. Rocket larkspurs, clarkias, coreopsis, nigellas, ænotheras, leptosiphons, collinsias, and many of the new Californian ones, may be sown immediately; but such as coxcombs, balsams, cypress vine, gilliflowers, schizanthuses, &c. should not be sown before the 15th or 20th.

Carnations may be repotted now, or they may be turned out in a good situation in the border.

Pansy seeds may be sown now; if plants have been raised in pots they may now be transplanted out into the border, selecting a partially shaded aspect and moist situation.

Tulip beds should be shaded by an awning of some kind, or the beauty of the flowers will be soon spoiled.

Chrysanthemum cuttings may be now put in, or the old roots may be separated, choosing only the best suckers.

Cuttings of heaths and epacris may be now put in.

Cactuses should receive larger supplies of water whilst they are flowering.

Camellias should be kept well watered and syringed frequently, till they have completed their growth.

Tuberoses, tiger flowers, and gladioluses may be now set out in the border.

Biennials and perennials may yet be transplanted.

Verbenas should be propagated where they are wanted for turning out into the border.

Oxalises and Cape bulbs, done flowering, may be removed from the green-house to the open air, and the pots laid upon the sides.

Trevirana coccinea; repot the small roots set out in March.

VEGETABLE DEPARTMENT.

Celery seed should be sown immediately for a winter crop.

Beans, of all kinds, may be sown about the middle of the month. Limas and sievas are so tender that they should not be sown then, unless the weather is very mild.

Cabbages, of the drumhead and Savoy sorts, should be sown some time this month.

Tomatoes may be sown this month, and the plants will produce abundantly in August.

Corn, cucumbers, melons, and all sorts of vegetables, may be sown any time this month.

THE MAGAZINE OF HORTICULTURE.

JUNE, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Notices of Green-houses and Hot-houses, in and near Philadelphia.* No. I. By A PHILADELPHIA AMATEUR.

Messrs. Hirst & Dreer, at the Woodlands.—The Woodlands, once well known as containing one of the first and the best collections of plants, in the early horticultural proceedings of America, has long been in a state of neglect and disuse. On a visit to the place, last October, we found the green-houses and hot-houses fallen in and decayed, and honey locust, paper mulberry, and other trees and shrubs of various kinds, so densely thick as to preclude the possibility of entrance, save by the pioneer, with his stalwart arm and sturdy axe. The gravel walks, once kept "neat and trim," were completely overgrown with matted grass, through which an occasional head of stunted box might be seen peering, marking the site of one of the numerous flower borders that erewhile were covered with blossoms of fragrance and beauty, now ranked with noisome weeds. The shrubbery, for want of attention, had sprung into all sorts of shapes, and bore evident marks of the rude hands of the rabble who passed them by in the season of bloom.

How different a feeling than that of distaste and disgust I experienced on my last visit. Civilization had been there. Workmen were rapidly engaged in putting the fences in order; the walks were as in olden times, and the flower borders had again resumed their pristine appearance. On entering the hot-house, I perceived a large collection of *Cacti*, of the most

vigorous growth; the plants of one and two years' growth, many of which were displaying, and others rapidly opening, blossoms. Plants of the *Passiflora alata* were in process of training, through the house; and the *cærulea racemosa* was covered with flowers. Large plants of the *Azalea indica* var. *élégans*, *phœnicea*, *purpurea pleno*, *álba*, &c., were making very rapid growth, and many other plants were developing blooms. We noticed an immense quantity of young plants from cuttings, progressing, and large quantities of cuttings in the process of rooting, many of which were pushing roots in a peculiar way, viz. in hyacinth glasses in water. Oranges, oleanders, passifloras, and gardenias, had long, sturdy roots, and were growing rapidly at top. The treatment is peculiar. The beautiful little "Forget Me Not," as it is styled, (*Lobelia crinus*) seems quite a favorite with Mr. Hirst, as I observed it growing every where, pendant from the shelves, and presenting quite a beautiful appearance.

The hot-house is about forty feet in length, and divided into an upper and lower apartment, being about twenty-five feet in width. The conservatory, on the old system, is nearly filled with large specimens of oranges, lemons, and various other plants, many of which were covered with blossoms and young fruit, and is over eighty feet long. The green-house was a perfect blaze of flowers, roses of various kinds, &c. I noticed the *Verbena Tweediana*, *Eyrediana*, *incisa*, *álba*, [*teucroides*,] *fúlgens*, *Kilvingtonia*, *Watsonia*, *Binneyana*, &c. in large quantities. The pelargoniums were in bloom; among them I observed the Mary Queen of Scots, *Adelinæ*, *Heri-cartianum*, *involucratum superbum*, *Micans*, *Beauty of Philadelphia*, *Wheelerii*, *Lord Denman*, *purpurea cærulea*, *Yeatmaniana*, *Purple Perfection*, *Lady Fletcher*, *Lady Fitzharris*, *Comptoniana*, *Dennis's Perfection*, *Admiral Napier*, &c.; and a beautiful seedling, a new variety, *Miss Thorburn*, (*Hirst's*), a fine rose, with very dark stripe, of the *Heri-cartianum* character, round petaled, and a beautiful flower. Several plants of the *Amaryllis Johnsoni* were bearing seed, and I noticed an immense collection of seedling bulbs, one year old, of the *Amaryllis alica*, in pots, several hundred plants, and a large quantity just appearing above ground, from seed of the present year. Some new seedling calceolarias; var. *Hirstiana*, *lutea superba*, &c., were the most beautiful we ever saw, the flowers an inch and a half in length, and beautifully formed. One plant of *Hirstiana* had several hundred blossoms open at one time, and presented a superb appearance in connection with the *rugosa*, *bicolor*, &c., which were dis-

playing their tiny blooms alongside: every blossom was impregnated with pollen from the *Marjoriána*, a new dark variety, raised by William Chalmers, Sen: the bicolor and rugosa, several hundred pods of which, hybridized flowers, were rapidly ripening seed. I noticed the new *Fuchsia fulgens* in flower.

The plants are all healthy and vigorous, and many of them very superior. The proprietors contemplate erecting new houses the coming season. An immense quantity of new dahlias were in rapid propagation, imported the present season from England. There have already been rooted and sold, over forty plants of the new striped carnation flowered one, (*Striata formosissima*,) which is in great demand, orders remaining on hand unfulfilled. Hirst & Dreer gained the first prize at the Pennsylvania Horticultural Society, at the last annual exhibition.

H.

Philadelphia, May, 1840.

ART. II. *On the Labors of the Gardener.***By J. E. TESCHEMACHER.**

WHEN we admire a beautiful, well grown flower, we little think how much pains and labor has been bestowed to produce it in the perfection to which it has attained. Permit me to instance the pelargonium, commonly called geranium. Many years have now elapsed, since, by various mixtures of plants, called hybridization, the first improvements were made in these flowers; and how inferior are those original improvements, to the large and delicately or vividly colored specimens now exhibited. All these have been produced by the constant care of the gardener, in growing his plants for seed in the strongest manner, in mixing the varieties with judgment, and attention to the minutest processes of nature; in raising, potting and nurturing his seedlings, of which, if ten in a hundred turn out fine flowers, he feels amply repaid; the rest may be thrown away. With these ten his labors begin again; they have to be divided into cuttings, these have to be made to strike root, to be protected against too much heat in summer, and against cold in the winter, to be repotted, watered regularly, kept clean from insects, and finally brought into the

beautiful state in which they are often seen, when exposed for sale. For these labors, he obtains twenty-five, or, perchance, fifty cents, or, for plants on which he has expended these cares for two or three years, probably a dollar. I do not mean to say that he is, or ought to be, dissatisfied, or to insinuate that the public do not patronize the gardener. Far from it: I hail and acknowledge the increasing taste on this subject with delight, and only wish to show that in making purchases of plants, an industrious, hard working, and meritorious class of men are encouraged, and that every dollar they receive is fairly earned. It may be said that plants, flowers, and fruits, are luxuries which we can well do without: this may be true in the abstract; but how much more innocent and engaging, how much more beautiful and interesting, to a well directed mind, are these, than multitudes of other *need not*s which are habitually indulged in.

What I have stated of the pelargonium may be said of many other tribes of beautiful flowers. The pelargonium, however, is of comparatively easy cultivation, and cuttings strike readily: but there are many other delightful plants which require very different treatment, and with which much more care and patience is required. Again; take the fruits. Who would not desire to see his table supplied every day during the season, with such charming fruit as the strawberries, currants, raspberries, peaches, &c. exhibited in the markets: these are all owing to the unceasing assiduity of the gardener; all the improvements between these and the fruits in their wild, uncultivated state, are due to his care; and to his labors must be attributed the facility with which plants of all these fruits are attainable by any one who has a spot of ground to cultivate.

Those only, who have been habitually engaged in the operations of the garden, can estimate the vexatious disappointments to which the gardener is always subject. The scarce and beautiful pink or carnation, of which he possesses a solitary specimen, obtained at high cost, which is watched and fostered with daily care, is just throwing up its strong flower stem, when it is nibbled off during the night by an insidious caterpillar, concealed in the earth, and his hopes, for that season, are destroyed.—A sudden wind prostrates his unprotected tulips, just breaking forth in their brilliancy, or scatters in destruction the brittle branches of his dahlias of promise. The hot sun prevents his strawberries from swelling, or dries them up, and he looks wishingly to the skies for rain. To these, and a hundred other vexations, is the gardener subject, until a gardener's patience, forbearance, and perseverance are

almost proverbial. Against these, every resource that his ingenuity can devise must be called into action;—he must shade against too much sun, water in days of drought, contend with the myriads of the insect creation, protect against the winds,—in fact, he must be quite alive to every part of his profession, and on his talent, industry, and attention to the minute details, will his success depend.

A gardener should always be a man of acute and accurate observation. One will immediately take notice of an effect produced by a peculiar treatment of a plant which will afford a valuable hint to pursue, when another will pass the same unnoticed and unheeded; and this habit of quick and correct observation is easily attained by strict attention, when young, to every operation which passes through the gardener's hands. In this way it becomes a habit, which is valuable in every walk of life. In conclusion, I should wish to see the gardener take a broad, comprehensive, liberal view of his profession, nor be imbued with narrow and selfish ideas, keeping to himself every improvement he discovers, for fear his neighbor should reap some little advantage from it, and, finally, leaving this world, and burying his secret with him. I state, unhesitatingly, that the immense impulse which has been given to horticulture, in England, France, Belgium, and Europe generally, within the last twenty-five years, is attributable mainly to the liberal interchange in magazines and other periodical publications, between practical gardeners, of their various methods of cultivating different plants,—an impulse, which, while it has certainly, in point of pleasure and delight, benefited the whole community, has especially benefited the gardener. These publications now exist here, and no doubt that the result will be the same, if conducted and supported in the same liberal way as in Europe.

J. E. T.

Boston, May, 1840.

We are much gratified in presenting the above remarks by Mr. Teschemacher, on the interesting subject to which they are devoted. The labors of no class of men have been so much underrated as those of the gardener. We particularly commend the latter portion of Mr. Teschemacher's remarks to the notice of every reflecting gardener: we have endeavored, on every occasion, to impress the same views upon their attention. Those who imagine, (and we know there are some who do,) that they are giving the public too much information, are only injuring their profession and themselves, by retarding the progress of a pursuit, on whose flourishing state their support depends.—*Ed.*

ART. III. *Pomological Notices; or, Notices respecting new and superior varieties of Fruits, worthy of general cultivation. Some account of several new varieties of Pears, which have fruited in the Botanic Garden and Nurseries of A. J. Downing, Newburgh, N. Y.* By A. J. DOWNING.

THE pear, in this climate, is certainly the prince of fruits. We speak now of the pear in its more modern acceptance among pomologists—not as a fruit ripening late in summer, or in the autumn, but consisting of at least one hundred distinct varieties of excellence, and at least thirty of most superior quality, which are capable of affording a supply for the dessert for at least nine months of the year. Unlike the peach, the cherry, or the plum, fruits that ripen and decay in a short period, the pear plucked (as it always should be,) from the tree at the approach of maturity, and ripened in the fruit room, is, next to the apple, the most durable of fruits; some of the fine and delicious new winter pears, as the *Easter Beurré*, &c. remaining firm through the whole winter, and ripening at the approach of spring.

As your readers are well aware, this noble fruit has been more than quadrupled in value, of late years, by the superior varieties that have originated abroad, and more especially by those which have been given to us by the celebrated *Van Mons*, of Belgium. The reputation of these new varieties abroad has been very high, and the colored plates of the varieties, which accompanied the written descriptions, executed in the most costly manner, gave promise of much novelty and beauty of appearance. As, however, varieties of fruit vary very much in different soils and climates, considerable anxiety has naturally been felt to see the fruit of all these new sorts in this country. Most of them are, we believe, fully equal here, to the descriptions given of them. Mr. Manning has already fruited as large a number as any individual, and has liberally furnished your readers with descriptive notices of the varieties, in your Magazine. It appears to us, however, both from the description given by him, and from the fruit he has produced, that the valley of the Hudson is naturally much more congenial to all these varieties of the pear, than the neighborhood of the sea coast. This may be owing to a difference in the soil, or the sea air, or perhaps

both these influences united. Certain, however, it is, that here we are not in the least subject to the blight and cracking of pears, of which Messrs. Kenrick, Manning, and Ives complain; as even the old St. Michael or Virgoulouse, the Brown Buerré, St. Germain, &c. annually produce, in our soil, abundant crops of the fairest and finest fruit.

In your last, our friend Mr. Ives, of Salem, has furnished a list of pears that have fruited with him, with some remarks on their qualities, which differ so much from the habit and appearance of those fruits as to excite much surprise here. Although Mr. Ives remarks that allowance should be made for the unsuitableness of the soil in his grounds, which is "a dry, sandy loam," yet with this allowance, we fear your readers might form unfavorable opinions of some of the really fine fruits which he describes. The Bartlett, or Williams's Bon Chrétien, *here* bears regularly and most abundantly, the fruit very large, often weighing fourteen ounces, and delicious in its flavor. The Madeleine is perhaps the best *very early* pear, very smooth and fair, and though not high flavored, yet juicy and agreeable, &c.

We have only leisure at present to pen a few short notices of some of the pears that have fruited here. This season, should the present fine promise of fruit be realized, we shall probably have seventy or eighty varieties of the pear in fruit, and will be able to give you more detailed accounts of the finer sorts.

Hericart.—This is a pear of the first quality; fruited the first time last season. Medium size; early and abundant bearer; color greenish yellow, with numerous small dots; flavor sprightly and agreeable; flesh melting. Ripe in September.

Beurré Bosc.—An early and most prodigious bearer. Two branches, grafted in 1837, each about thirty inches in length, were literally loaded with fruit, and alone produced a peck of pears last year. Ripened in the house, this pear matures gradually, and the flavor is excellent, somewhat spicy; the color yellow, inclining to russet; form pyramidal.

Bezi de la Motte.—This is a most superior variety. The fruit, when in perfection, about three inches long; form, roundish turbinate; color, yellowish green, with innumerable round grayish dots, very smooth and fair; the flesh is rich, melting and buttery, with a very peculiar and agreeable flavor; abundant bearer; branches rather wavy or pendulous; ripe the beginning of October.

Bergamot Suisse.—This is a remarkably beautiful fruit, of the bergamot shape, being distinctly striped on the exterior,

alternately with green and yellow. The trees are of very thrifty and upright growth; the fruit good size, and though not of first quality, is yet full of juice, sweet, and well flavored. Ripe the end of September.

Frederick of Wurtemberg, (Capiaumont of the *Pomological Magazine*.)—This superb fruit, well known to all amateurs of the pear, bears abundantly and ripens well here. Its delicious flavor, and rich scarlet and yellow coloring, like that of a waxen fruit, will render it a favorite every where.

Delices d'Ardenpont.—A very large pear, four inches long, oblong, pyramidal, smooth, and dark green: ripening in November. A fruit of the first class in appearance and flavor.

The Napoleon succeeds admirably here, producing abundant crops of juicy and pleasant fruit. Flesh very melting and agreeable, though not high flavored.

Beurré Diel.—A great bearer; the fruit large, and of a delicious, melting, sugary flavor, with much aroma. Decidedly the finest early winter pear yet fruited here.

Green Sylvange, (*Sylvange Bergamot*.)—A late autumn and early winter pear of merit. Color bright green; flesh melting, very juicy and sweet; fruit irregular, flattened towards the eye, lengthening towards the stalk.

Duchess of Angouleme.—This superior fruit is already comparatively well known throughout the country, and belongs to the first class of pears, often weighing a pound, and, withal, of the finest flavor and appearance. Worthy of extensive cultivation, as it is inferior to none for a late autumn pear. The *Easter Beurré* is its compeer for a late winter pear.

Bloodgood.—This, in our estimation, is decidedly the finest of the early pears. The fruit is of medium size; the color yellow, inclining to russet. A certain and constant bearer, and should be in every collection.

St. Ghislain.—A bright yellow skin; the skin or flesh elongated over the stem or stalk half way up, are the most striking characteristics of this fruit, externally. It is a buttery, luscious pear, of the first class, unsurpassed in flavor.

Buffum.—If ripened on the tree, this might be thought an inferior variety; but plucked just before maturity, it becomes one of much merit. In shape and color it much resembles our Virgoulouse or St. Michael, though differing from it in being more highly colored on the sunny side. Ripe in October. A prolific variety.

The *Urbaniste*, *Marie Louise*, *Dix*, and *Seckel*, are four pears possessing every desirable quality to render them uni-

versally admired. The Golden Beurré of Bilboa promises to be a valuable sort.

The *Gansel's Bergamot*, the *St. Germain*, the *St. Michael*, and the *Brown Beurré* are still great favorites in the valley of the Hudson; they are undoubtedly among the finest of pears, and thrive here with all their ancient vigor. Near the centre of one of our gardens, we have a standard tree of the *Brown Beurré* in perfect vigor, about twenty years old, which produces, without any extra care, from six to ten bushels annually, of magnificent pears. Those of your readers who may remember the specimens of the fruit of this tree, shown at the last exhibition of the Massachusetts Horticultural Society, will, we are confident, admit, that this fine old sort has not yet "*gone to decay*."

The pear undoubtedly requires a strong, loamy soil, to bring it to perfection. As we have already remarked, the neighborhood of the sea-coast seems prejudicial to the duration of the more delicate and finer varieties; in such situations the fruit is liable to become spotted or rusty, the outer surface becoming indurated and cracked in various directions. This may, however, be owing to the light sandy soils common in those localities, and it is not improbable that marl or stiff loam, applied as a corrective to such soils, might greatly tend to remove this malady.

A. J. DOWNING.

Newburgh, N. Y., May, 1840.

The above article, by our correspondent, Mr. Downing, will be read with great interest by all lovers of fine fruit. We have already remarked, (Vol. V., p. 408,) that the soil of both Mr. Manning's and Mr. Ives's nursery, though very well adapted to the growth of trees for sale, does not appear to be sufficiently deep and rich to produce fine fruit, and that the pears which each have exhibited before the Massachusetts Horticultural Society, were not so large and handsome as those from other cultivators in the vicinity of Boston;—and although Mr. Manning's success has been sufficient to accurately describe the different kinds which he has ripened, his specimens cannot be considered as equalling the descriptions which have been given of the same by pomological writers.

Our correspondent remarks, that the information, communicated by Mr. Ives in a late number, (p. 121,) has excited some surprise in his vicinity: it has equally so among cultivators here. Mr. Ives's remarks upon some of the varieties struck us as somewhat peculiar, and we were led to believe that there was some error, until, upon close examination

of the copy, we found we were correct: we had never known the Bartlett, so called, to be "worthless," or the Cushing, to be a "small bearer," but we inferred that Mr. Ives's soil was the cause of this, and that the same fine kinds might prove so in similar soils. We have reason, now, however, to believe Mr. Ives was very hasty in his observations, and that the trees were exceedingly small, and only bore fruit one or two seasons, under very adverse circumstances, and that they could not be considered as giving a fair estimate of the fruits, even allowing them to grow in his own "dry and sandy loam," if the trees had attained sufficient age to produce a hundred pears. Mr. Manning's nursery adjoins that of Mr. Ives's, and the soils are precisely alike, and Mr. Manning's remarks may be considered as giving a fair description of the fruits in either situation.

We again commend Mr. Downing's article to the notice of every cultivator: we saw the fine specimens which he furnished at the Annual Exhibition of the Massachusetts Horticultural Society, last autumn, and can bear witness to their superiority to any thing of the kind contributed by cultivators in this vicinity, and his notice of the above varieties may be relied upon as giving a faithful description of their real worth. Our readers may look forward to the close of the now promising season for a full description, from Mr. Downing, of all the new kinds which may ripen in his nurseries during the autumn.—*Ed.*

ART. IV. *Observations on some species of Mosses, (Músci.)*

By JOHN LEWIS RUSSELL.

IN examining a large lot of pear trees, from the French nurseries, my attention was attracted to the kinds of moss in which the roots were enveloped, the results of which I submit to your notice.

The valuable properties of these little plants, almost universally scattered over the globe, are well known to every collector and nurseryman. The delicacy of their foliage and stems render them peculiarly sensible to moisture and to drought, and the durable qualities of their substance give them preeminence over every other material in packing choice plants. Besides these ruder economical purposes, they enter,

in no small degree, into the successful treatment of the finest orchideous epiphytes and ærides, whose inflorescence requires patient experiment, and constant, uniform moisture.

The moss which mostly obtains with us, in packing the roots of trees and plants, is the *Sphágnum*, of which we have various species in the immediate vicinity of Boston. Its texture is of a soft and spongy nature, and capable of imbibing a very great quantity of moisture, and of retaining it for a considerable space of time. This moss enters largely into the composition of our peat, and seems expressly adapted in the economy of nature, to speedily convert the barren morass into rich and fertile meadows. Among its stems may be found growing, some of the prettiest and most beautiful of our native plants, such as *Drósera longifolia*, and *rotundifolia*, *Cymbidium pulchellum*, *arethusas*, &c.

The species of mosses from the French nurseries, did not, so far as my observations extended, comprise a single instance of *Sphágnum*. They were kinds of a drier native habitat, and of a stronger texture. The sphagna do not seem to be so much used for these and similar purposes in Europe, as with us. Whether they are rarer, or considered inferior, it is not easy to determine.

1. *Hypnum triquetrum*.—Among the most abundant was *Hypnum triquetrum*, found also in this country, according to Micbaux and other authors. Its form is irregularly pinnate; leaves squarrose, cordate, somewhat sharp at the point, and serrated on the edge. The branches which compose the pinnæ, unlike the main stem, are pointed, and root into the ground. It attains the length of nearly a foot, remarkable for elasticity, and is used, among other employments, in packing brittle wares.

2. *Hypnum pûrum*.—A beautiful plant, of a more regularly pinnate form: branches alternating; leaves imbricated, of a curious ovate form, and furnished at the tip with a short, oblique point: color a delicate light green. An European species, and in great request in England among anglers, for cleansing worms for bait, by a process called scouring; divesting those creatures of the earthy particles by their crawling through the soft and pliant material. Burnett tells us, with a seeming inclination towards the gentle and captivating occupation of the line and rod, that "true Waltonians prefer this species; half bred anglers use it indiscriminately with other mosses;" a refinement of as grave a character as some of the minuter pursuits in amateur horticulture!

3. *Hypnum squarrosum*.—With pale green leaves, curiously expanded in a rosæform figure at the top of the stems,

and with long, flexile shoots: not only pretty as a plant, but admirable for similar purposes, for which, in this instance, it was used.

4. *Hypnum proliferum*.—A most exquisite moss, well known to almost every lover of picturesque beauty in its minuter points of view; investing the smooth surfaces of rocks, or covering, with its intricate and feathery foliage, the shady stones and decaying trunks in the rich woods of almost every northern climate. In such situations I have met with it, and have been often attracted by its charms. What a pity that we cannot introduce some of these most wonderful of Flora's productions into our culture! We search the globe for the rare and curious, but neglect the really exquisite which is near by, and which can be gathered by every hand. The "mossy bank" has been often in the poet's song, but words feebly convey the beauty of its living and sempervirent charms. Nature seems to have exerted its energies in those smaller forms, and produced, with unrivalled skill, these humble, but more complete organizations.

5. *Polytrichum commune*.—So inferior a moss for packing, that probably its occurrence was by an indiscriminate or accidental culling. Like the last mentioned, it is interesting, as connecting the cryptogamia flora of that part of Europe with ours. The polytricha are natives of temperate regions. To the hardy Laplander, this species furnishes a wholesome and elastic bed. Linnæus tells us, in his *Flora Laponnica*, that large patches of it are ingeniously cut from the ground, to supply this need; and with no little care to discriminate between the barren and fertile shoots; the latter being soft, and the former, from the rigidity of their heads, converting Nature's boon into an uneasy couch, pricking and annoying the sleeper. Of sundry other domestic uses the species is capable, even in the manufacture of brooms, according to White, who, in his *History of Selborne*, details the method at some length.

The economical uses of the moss plants exhibit a striking instance of the truth, that nothing seems made in vain. Many of the minutest forms serve in some manner, in the operations of nature, assisting in the great scheme of creation, or serving to instruct the human mind in the profoundest lessons of Divine Wisdom! As types of the earliest forms of vegetable life, in the infancy of the world, they are interesting to the student in its history; and, as the miniature productions of the floral world, they even rival the more grand and magnificent of its attractive charms!

ART. IV. *Descriptive Notice of several seedling varieties of Pelargonium, recently raised by Thomas Cowan, at the gardens of Col. Perkins, Brookline, near Boston.* By ALEXANDER GORDON.

THE genus *Pelargonium* has become so universal a favorite, that any eulogium on its merits, as a green-house or window ornament, would be superfluous. The anxiety among amateurs, to possess every new introduction, whether imported, or of native origin, is well known. For a long time, the difficulties attending the importation of these floral gems made the varieties in American collections rather limited; but at the present time, there are various establishments in the United States, whose *Geraniaceæ* would rank with the famed collections of Europe. Independent of the importations, which include every desirable variety, many valuable acquisitions have been added to this delightful tribe, by varieties of American origin. The object of this communication is to record in your valuable pages some very esteemed varieties raised by Thomas Cowan, son of Mr. Cowan, gardener to Col. Perkins, Brookline, near Boston. Mr. Cowan raised above fifty seedlings last season, about one half of which have flowered this spring. Seven years ago, and not one of those which have blossomed but would have ranked high, and the following will bear a comparison with any in the country, even at the present day.

Cowan's Beauty of Clydesdale.—A splendid plant. Corolla very large, slightly recurved; color dark rose, finely pencilled with large dark spots, lower petals light rose. The flowers stand boldly to the view, in fine trusses; foliage leaves orbicular; habit of plant very compact. Several good judges have pronounced this variety equal to any in America.

Perkinsianum.—Corolla dark purple, distinctly marked with spots: foliage very compact: a very excellent variety.

Cowan's Sir William Wallace.—Corolla very large; upper petals dark rose, beautifully pencilled with dark brown, interspersed with white; lower petals vivid light rose; foliage very large: has much the habit and appearance of Dennis's Perfection.

Miss Cabot.—Corolla: color French white, pencilling very regular, terminating with a rich spot: foliage large, and very compact in habit.

Miss Gardener.—Corolla very large, light lilac, finely pencilled, with a rich dark spot. A remarkably free flowerer.

Miss Carey.—Similar to the above, excepting the foliage, which is smaller, and smoother in the leaf.

Gordónii.—Corolla very large: color of upper petals dark purple, with a rich, deep, velvety spot, on a white ground.

Osceola.—Corolla large: color French white, finely pencilled with rich lake colored stripes, which are terminated with a bold spot: foliage large, and the plant very compact in habit.

Hector, *David Crocket*, *Audubon*, *Black Hawk*, and *Robert Burns* have considerable merit, and are very distinct; the latter, in particular, is an excellent variety. Those which have not flowered are very promising. Indeed, I seldom, if ever, saw so many excellent varieties from a single batch of seedlings.

Yours, very respectfully,

ALEXANDER GORDON.

May 4th, 1840.

ART. VI. *Some hints upon the treatment of Green-house Plants during Summer.* By the EDITOR.

WE have oftentimes thought, when viewing many of the very fine collections of plants in the summer season, which now abound in the amateur gardens, throughout the country, that there was a great want of care and attention in the management of the plants during that season of the year, when placed out of the green-house in the open air; and it has often occurred to us, that a few hints upon the negligent mode in which many of the more delicate and beautiful plants are treated, might be the means of inviting attention to the subject, and prevent perhaps, in some degree, that careless disposition of the plants which too many cultivators seem to think of little or no importance when out of the green-house or conservatory.

We shall now, briefly, note down some ideas which have occurred to us, and we hope that they may tend to induce cultivators, especially those who possess choice collections, to give more attention to their green-house plants during summer, not only for the purpose of keeping them in a healthier and more vigorous condition, but of rendering them interesting ob-

jects throughout the whole year—the splendor of their winter habitation and pleasing ornaments to the garden all summer.

Who, that is a lover of plants, has not often admired the neatness and beauty of a well arranged green-house,—the vigor and elegance of the plants, and the brilliancy of the blossoms?—from November to May, how much gratification and delight they afford;—but from June to November, how different is their appearance! When the season arrives for removing the plants from the house, a general clearing is made at once of every object there;—the camellias, azaleas and heaths, are placed in one situation, the roses and geraniums in another, the cacti tribe huddled together in some out-of-the-way place, and the different kinds of bulbs thrown together in another; some scattered hither and thither, under the shade and drip of trees, and others exposed to the full blaze of a burning summer's sun, and often times without any reference to the shade, light, heat or moisture, which each particular tribe requires. Some of the tallest species blown about by the wind, and sweeping the ground with their branches by the continual upsetting and rolling about of the pots—some with broken pots, others overrun with moss and weeds, the earth ploughed up by the continued action of the worms—the whole oftentimes presenting such a confusion and wildness as to lead one, not familiar with plants, to imagine that they possessed no value sufficient to render them objects of any care or attention.

This carelessness and neglect of green-house plants, during the summer season, may be attributed, in a great degree, to the simple cause of the uninteresting appearance of the plants, of many species and varieties, when not in blossom; having completed their season of flowering, and, some of them, perfected their growth for another year, they are looked upon as objects affording no gratification sufficient to bestow other than the necessary labor upon them, of keeping them alive by occasional supplies of water, (oftentimes without much regard to regularity,) until placed in their winter domicile to again reward the cultivator, by a brilliant display of their varied and pleasing blossoms for his assiduity in nursing and fostering their growth. Year after year the collection is shorn of some of its finest ornaments, and, unless a stock is kept up by continual propagation or by purchases from the nurseryman, it is soon reduced, and what remain are but sickly objects, which, as they become less vigorous, receive the less care.

We are induced to believe that in amateur collections, where there is not a professional man, many fine plants are lost by in-

attention during summer: though much anxiety is often felt for the fate of the plants during winter, they suffer far less, in general, than they do in summer, provided ordinary care is then given them. The burning summer's sun, the hot parching winds, and the frequent heavy rains, in our climate, are more fatal to the health of plants, than the cool temperature of any indifferently regulated green-house, during winter.

Where there is a choice collection of plants, the first consideration should be, next to a convenient, large and well ventilated green-house, to prepare a suitable place for the plants during the summer season. The situation should be open and exposed to the free circulation of air, and it should not be under the drip and shade of large trees, as is too often the case. It should be a situation prepared on purpose for the plants; and if judiciously chosen, and the plants all properly and neatly arranged, it may be made as pleasing and interesting a portion of the garden as could be desired.

The plants should be sheltered from the northerly winds, either by a fence or trees at a short distance from them; and if the place could be selected where it was in some degree protected from the wind at each point, it would be all the better. The first operation is to prepare a foundation for the pots, in such a manner as to keep the worms, as much as possible, from entering them. For this purpose various substances and various methods have been recommended: most writers advise a layer of coal cinders to the depth of four or five inches, but these are not easily to be obtained in this country, where very little sea coal is used, except in the vicinity of cities, and recourse must be had to other means for effecting the same object. A correspondent of Loudon's *Gardener's Magazine*, noticed in our pages, (Vol I. p. 394,) recommends excavating the earth to the depth of six inches, and filling the space with sand, on which the plants may be placed. We have found a layer of the fine siftings of anthracite coal, about four inches in depth, and well rolled down, to answer a good purpose. On such a foundation we have placed our plants for four or five years, and by adding a little fresh siftings on the surface every year, have been but slightly troubled with the worms. When neither of these substances can be conveniently had, planks, placed upon bricks, answer very well.

The best form of ground for arranging and shading the plants is a parallelogram; a frame may then be erected, and by having an awning upon the same, the plants may at all times be protected equally from the scorching sun and the heavy rains; but in whatever form the bed or beds are laid out, the

plants should be so arranged as to admit of their being easily watered: they may be placed in circles, with the tallest in the centre, or in rows in the same manner, always grouping those together which require about equal supplies of water at the root and over the foliage. Camellias, rhododendrons, azaleas, and such hard wooded species, may be placed together; heaths, epacrises, diosmas, pimeleas, and New Holland plants generally, by themselves; cactuses, stapelias, and other succulent plants requiring but little water, together, and miscellaneous plants as they approach one another in similar treatment; geraniums, and most soft wooded plants requiring considerable sun, may be placed in most any situation where there is convenient room; when there is sufficient space in the rear of the green-house or conservatory, with a wall, fence, or trees to break the north wind, it will be found the best place for arranging the plants; where the collection consists of but few plants, and those principally camellias, azaleas, &c., it may not be deemed advisable to be to any great expense to prepare a place for the plants: in such cases they may stand on a prepared border, adjoining the back of the green-house, and shaded, if the sun strikes them too powerfully, by a slight awning running down from the back of the back wall to the distance required. This will answer every purpose.

Having given these general details, we shall offer some remarks on the treatment of the plants, under the following heads:—Removal of the plants from the Green-house,—Shade,—Water,—and Removal to the Green-house in the fall.

Removal of the plants from the Green-house.—By the first of June is as early as plants can be taken from the green-house with safety; some kinds will not bear removal at that period, but a large portion of them may be taken out, so that the remainder will have a better chance to receive the due benefit of a free circulation of the air around them; occasionally some plants do better to remain until July, but their earlier or later removal oftentimes depends upon the weather; we have known it so cold during the first fortnight in June, as to render it highly prejudicial to remove the plants at that time; but, as a general rule, that may be taken as the period to commence removing them to the open air.

If the collection embraces a fine assortment of camellias, these will be the first thing to look after. If their growth commenced very early, and they have fully completed it, began to harden their young wood, (which may be easily known by its turning brown,) and just show the flower buds, they may be removed; or those only which are thus advanced may be taken

out, and the remainder suffered to remain a little longer. It should be a general rule, never to take camellias out of the green-house until they show their flower buds, as they oftentimes do not perfect any if removed too early: the sudden transition from the house to the open air checking the rapid flow of sap to the buds, which have already begun to form. It is best, therefore, to take out only those which have tolerably prominent flower buds, and leave the remainder to be removed from time to time, as they are ready.

Rhododendrons, azaleas, daphnes, &c. may be removed at any period after June 1st. They should be placed at once where they can be shaded from the sun, especially if the new growth is not completed. Roses may be removed immediately and plunged into the border, or retained in pots, and placed where they can receive the sun part of the day. Geraniums, if yet in flower, may remain in the house, where they can be conveniently shaded, and where they will be a great ornament until July; as soon as their blooming is over, remove them at once to a half shady place, where they are to be pruned in and remain until the middle of August, when they may be fully exposed to the sun. Ericas and New Holland plants may be taken out with the others. Pots of oxalises, ixias, &c., which have done flowering, may be all removed to where they can be protected from heavy rains. Cactuses may also be removed, as the open air seems to harden their shoots, and cause them to bloom more abundantly. With the exception of camellias, as above noticed, nearly every plant may be taken from the green-house.

Shade.—The incidental remarks which have been made above, relating to shade, leave us less to say on this head. Camellias should not be allowed to have the sun more than four or five hours in the morning,—say until ten o'clock; rhododendrons, azaleas, daphnes, and most evergreens, may be allowed the same; heaths may be allowed somewhat more, though it is not best to have too much; small plants of heaths, as well as azaleas, do well in frames facing the north, (see p. 26;) cactuses may be allowed the sun, both morning and afternoon, only shading them two or three hours at noon; and roses and geraniums may be exposed to it half of the day. Every plant cannot be particularized, but those which seem to possess similar habits to these now named should have the same treatment. If the plants have been arranged as has been advised, the camellias and other evergreens may be placed on the north, and the others on the south; and the shade, by being fitted with

rollers, can be put up or down at pleasure, and at different hours of the day.

Water.—To give due supplies of water, and at proper times, requires some judgment; in dry and parching weather, which often occurs, the plants will need an abundant supply, while in cooler and more moist weather, a small quantity will be sufficient: as a general rule, water should be given every night in fine weather, and at other times once in two days. Plants perspire rapidly, and as they generally show outward symptoms of aridity very quickly, those which need water may be readily known. Camellias should be syringed three or four times a week, throwing the water with force all over the foliage and branches, to dislodge all dust and insects. Rhododendrons, and other hard wooded plants, will also require frequent syringing. Roses, geraniums, and other soft wooded plants, must be well supplied at the roots, and occasionally a little thrown over the leaves. Cactuses should be watered well till they have completed their growth, which will be the latter part of August. Heaths must be carefully looked after, judiciously watered, and frequently syringed; when the pots are plunged, they will require less water. In September, and just before the plants are housed, the nights being longer and cooler, with heavy dews, gradually lessen the supplies of water. Some plants will need repotting in the autumn; those that do, should be set aside and attended to in good season, in order that the roots may get established before they are taken into the house.

Insects.—The plants are often troubled with insects during summer: the red spider, the aphides, the brown scale, the mealy scale, and some others infest the plants, and sometimes, if not carefully looked after, increase and spread so rapidly, as to injure the plants very seriously; the red spider is particularly troublesome, and in hot, dry summers very numerous. Liberal supplies of water, by the means of a syringe, is the best preventive, and, if regularly given, will keep them at bay; the aphides cannot easily be destroyed, except by fumigation with tobacco. The brown scale is a dirty and most disagreeable insect; they are not so injurious as the others, but they keep the plants in such a slovenly state, that it should be the first object to get rid of them. Camellias, oranges, oleanders, and other hard wooded plants, are the most infested by them. The only sure method of destroying them is to scrape them off carefully with some soft pointed instrument, as the tooth of a comb, or a piece of wood, and wash the plants with soap suds. Camellias sometimes lose their flower buds and leaves, if the scale is allowed to increase and cover the shoots. These are the

principal enemies of the gardener or amateur, and are readily destroyed if attempted in due season.

Removing the plants into the Green-house.—As early as the first of October, and occasionally before that period, removing the plants to the house must be commenced. Geraniums, being the most tender, will require to be taken care of first; other tender plants should be also got in; cactuses, and succulents of all sorts, must not be neglected. Rhododendrons, camellias, &c. will bear slight frosts without injury, and fears need not be entertained of any damage, unless the thermometer fall below 30°. We have even had them exposed at 26°, and could not discover that they suffered any; repeated chills, however, if too much prolonged, might be injurious. Every plant should be examined before taken into the house; all the pots should be cleaned, the surface of the soil top-dressed, (unless lately repotted,) and the plants trimmed and neatly tied up where they require it. As much should be accomplished as possible, before the plants are taken into the green-house; washing, cleaning, top-dressing, &c., if neglected till that period, will cause much trouble and delay in the arrangement of the plants. The camellias will require to have their leaves well washed, if they have stood in a dusty situation, as nothing detracts so much from the beauty of the flowers, as the foliage covered with dust; the pure and delicate tints of the flowers are heightened, in a great degree, by the deep green glossy surface of the foliage.

In the arrangement of the plants upon the stages, or on the back border, if there is no stage, much will depend upon the taste of the cultivator. The large and tall evergreen shrubs should occupy the back stage or border, placing the dwarfest nearest the walk. The front stage may be devoted to geraniums, roses, &c., and the front shelves to winter bulbs, such as oxalises, &c. The Cacti may occupy the highest and most out-of-the-way station to be found; the nearer the glass, the better: in such situations they will perfect their flower buds, and, if very sparingly watered, will flower abundantly. All the plants should be arranged, and the house in order, by the middle of November.

When we commenced these remarks, we did not intend to make them so general; but, as we have proceeded, some things have struck us which we have deemed worthy of record. We might particularize many plants, which require quite peculiar management, but to do so would occupy more space than we could well spare. We shall however, at a future time, again revert to the subject, and offer some observations on soils, potting, &c.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Packing seeds for exportation.—A paper was read at a late meeting of the London Horticultural Society, from Dr. Hugh Falconer, superintendent of the Botanical Garden of Sakarimper, dated Cashmeer, 1888, on his method of packing seeds for exportation. A parcel which he sent to the Society vegetated with so much success that the Vice-secretary was desirous of laying his method before the public. It is as follows:—

"I have been gratified to find that the Himalayan seeds, sent by me, succeeded so well with the Horticultural Society.

"As the result seems to have interested you; I may mention the mode in which the collection and package were managed. The seeds are collected generally on a march along an extensive tract of country; as a general rule, the pericarps are not detached, but the fruit and seed immediately packed up in paper; the closed paper packets, especially those containing baccate or juicy fruits, are daily exposed freely to the sun; and, to increase the heating effect of the solar rays, the packets are spread out on a black blanket, and kept so till the paper of the packets feels dry, a man being employed in turning them occasionally: the paper imbibes moisture during the night, and the process is repeated till all moisture is thoroughly dissipated. In the rains, which embrace about half the seed season in the Himalayas, the sun is not available, and the packets are daily dried before a gentle fire, till the same effect is produced; but the result is much more uncertain as regards subsequent germination. In packing up the packages for transmission to Europe, the little packets are folded up loosely in a couple of envelopes of paper; and an invariable caution is given along with them, never to let the packages get into a box or trunk, much less into the ship's hold; but to suspend them loosely from an airy corner of the cabin, free from the risk of moisture and spray.

"On a march, where you move daily under canvass from place to place, the amount or duration of shade required for drying seeds, or their fleshy coverings, is not available, or I should certainly never torrefy the packets in the sun; all that can be said of the method is, that it speedily dries the seeds without killing them. The management on board ship appears to me to be every thing; loose wrappers, free exposure to the air in shade, and exemption from boxes, trunks, or the hold.

"The exposure to the sun, with the augmented heating effect produced by radiation on a black blanket, is perhaps interesting with reference to the conditions mentioned by you at p. 304 of your *Introduction to Botany*, second edition; but the effect is probably merely a heating one, as the opacity of the paper, and the reflecting quality of the light color, must prevent the luminous rays being transmitted to the seeds. I should certainly expect a different result in the end, with reference to germination, if the seeds were directly exposed.

"On one occasion, I received from England a large investment of garden vegetable seeds from a London seedsman. They were packed in the thick dark brown paper which is generally used by grocers

and seedsmen, and which, for the facility of folding, is usually in a somewhat damp state. The packages were nailed up in a large wooden box, with numerous folds of this paper, and the box then hermetically sealed in a tin case; it then found its way into the ship's hold. The damp paper, which, in the temperature of England, say at 50°, would have mattered little, became an important agent when the ship got into the tropics; at about 80° the damp became a hot vapor, and, when the seeds reached me, I found them all in a semi-pulpy and mildewed state, in fact parboiled by the steam process; and, out of a £30 investment, not a seed germinated.

"I shall soon have the pleasure of sending you another collection, made on the hills to the westward, and in Cashmeer, where I now am.

"I have found the *Prángos* *pabulária* growing in the valley."

With reference to this communication, it was stated that by far the greater part of the seeds alluded to by Dr. Falconer were in a fresh state when they reached the Society, and presented a remarkable contrast with those which usually arrive from Calcutta and elsewhere. There can be no doubt, that the most important precaution to observe, in conveying seeds safely through a long voyage, consists in exposing them freely to the air; because, if that is attended to, the damp, which, when in combination with a high temperature, contributes so much towards destroying the germinating power of seeds, is dissipated as fast as it is formed. It was added that, in the experience of the Vice-Secretary, no better plan was known for sending to great distances most kinds of seeds, than, after being well dried, packing them loosely in common brown paper, and enclosing them, without pressure, in small coarse canvass bags, suspended from the sides of a cabin, where they could be kept dry. The Society had tried various other methods, such as packing in sugar, and in charcoal; enclosing in tin cases, in bottles sealed up, &c.; and all such plans invariably proved unfit for the preservation of the germinating principle of seeds; especially the two last, which had long been known to be a means of destroying, rather than preserving, life, although still persevered in.

It was added, in illustration of these observations, that the most successful instance of introducing seeds of the deodar cedar, from India, occurred some years since, when a plan, similar to that now recommended for adoption, was adhered to. In the year 1831, the Hon. T. Leslie Melville, on his return to England, brought with him some cones of the deodar, thrown loosely into a drawer in his cabin; these were presented to the Society by that gentleman, and were so fresh, that nearly the whole of them germinated immediately upon being sown; and, in fact, furnished the principal part of the plants which the Society has been for some years distributing of this most valuable tree. (*Gard. Mag.*)

Edgings for a Flower Garden.—For an edging, box is chiefly recommended. Box!—not always kept in order, and in such a case a harbor for vermin!—the most greedy and rapacious blood-sucker of every thing within its reach, the exhauster of the virtues of the richest compost. Next come thrift, bachelor's buttons, primroses, and even London pride, all tending to weeds, and all growing out of line: to avoid this, flower beds are often edged with board, which soon falls to decay. The best and most permanent edging I have ever met with is slate, set lengthways, three inches under, and three inches over the level of the alley or walk, the edges of the beds filled in the

interior to the full height of the slate. I know an edging of this description made sixteen years ago, which is still in the highest perfection; at first, the outside of the slate was painted green, which gave a great neatness to the garden; soon after, an edging of gentianella was planted at the inside of the slate and close to it, which came into great beauty, and hung over the outside, forming an edging at top of three or four inches wide, requiring very little attention, and decorating the edges of the beds with a profusion of its large, rich, and graceful blue flowers, which, when lined by a single row of yellow crocus, usher in the spring in the most vivid colors. A chief perfection of this edging is, that it is permanent. (*Hort. Jour.*)

ART. II. Foreign Notices.

FRANCE.

Horticulture in France.—The great annual Flower Show of the French Society of Horticulture took place last September, but the official accounts were not, until lately, published in the French journals, from which we find a translation in a late number of the *Horticultural Journal*, which has recently reached us. Addresses of some length were delivered, on the occasion, by the President the Vicomte Héricart de Thury, and M. Soulange Bodin, the Secretary. These addresses give much information relative to the present state of gardening in France. Believing some extracts from these addresses may be interesting to our readers, we quote the following.

The President thus commenced his address:—

“Ladies and Gentlemen, a court without the presence of the fair sex would be a year without spring, or a spring without roses, according to the saying of Francis the First, of gallant memory, who thus expressed himself when he organized the establishment of the young queen, Claude of France, and appointed, as her ladies of honor, the youngest and handsomest women in the kingdom. Such, notwithstanding our flowers, would be our meetings, without the presence of such blooming faces as those I see before me. We have met to hear an account of the progress of horticulture during the past year. The secretary will lay before you a *résumé* of the whole, and I will merely occupy your time for a brief period, whilst I speak a few words on the state of the science in the present day. I call horticulture a science, for it is no longer the simple art of the gardener, employed to cultivate the flower-bed or the kitchen-garden; it is an inviting science, and immense in its details, for it comprehends the art of cultivating not less than nine distinct kinds of horticultural ground,—1st, the plain kitchen-garden; 2d, the fruit garden or orchard; 3d, the mixed garden, embracing the other two; 4th, the flower garden, with its hot-houses and conservatories; 5th, the flower garden, united with the fruit garden; 6th, the botanical garden, with its nurseries, and its schools for using plants in arts and manufactures; 7th, the pharmaceutic garden, with the application of plants to medicine; 8th, the extended pleasure ground, whether private or public; and 9th, the landscape garden, whether natural, or romantic, or English, or Chinese.

"It is not my intention to enter into the detail of each of these several gardens. I will confine myself to fixing, for a moment, your attention on facts well known, but highly important, relative to, 1st, Kitchen gardens; 2d, Fruit gardens; and, 3d, Flower gardens.

"Of these the first mentioned is the most simple, being consecrated to the cultivation of plants used for food. Yet, simple as it is, it is that which requires the greatest attention and the most unremitting care. To lose the least possible ground, and to consecrate to each plant the portion most favorable to its growth, would appear to be all that is required for perfect success—and when the ground is good, and the position is favorable, nature demands but little more. But *to produce without cessation a succession of plants* from the same ground—to obtain some before their natural time, and others after—to supply day by day the wants of a large city,—will be found to require extensive knowledge, great experience, and the most untiring industry. For large towns the profession of the market gardener is one of the greatest importance, for on him are thousands dependant for a portion of their daily food. This profession then calls loudly for the protection of the highest powers in the state; and I may be allowed to say, that the *authorities scarcely seem to be aware of the importance of this profession*. To give you an idea of the labors of this ever active class of men, I need only mention that more than one hundred thousand acres of land produce, one with another, more than three thousand francs (£120) of produce each year, and that this quantity of land gives the means of existence to more than one hundred thousand families, each containing, on an average, five persons. This calculation will convince you of the extreme importance of this class of the community. Still they are too little known, and when the world consumes the produce of the kitchen garden, they little think that it has proceeded from a never ceasing labor, and from exertions which must not relax by night or by day. Yet for ages have certain families in the neighborhood of Paris devoted themselves to the occupation I have just described. Amongst them is the name of Boudier, to whom has been awarded the first prize. With him you will also find associated the names of Vilmorin, our grand master in horticulture, Jacques of Neuilly-du-Roi, Leblaus, Bossin, Loisel, Tollard, Glorian, Gontier, Devillers, Chavart, &c. &c., all of whom have exhibited the finest specimens of vegetables. Nor must I omit the Abbe Voisin, the worthy superior of Foreign Missions, to whom we owe the collection of all the vegetables and plants growing in China; many of which, owing to his exertions, are now naturalized in France.

"The fruit garden interests scarcely a smaller number than that of which I have just spoken. The consumption of fruits is enormous in Paris. I do not mean forced or early fruits, but such as are within the reach of every one. I can state, that the value of fruit consumed in Paris amounts to several millions of francs a year, though I cannot name the exact sum; yet not less than twenty thousand families, or one hundred thousand persons, exist by the cultivation of fruit trees intended to supply Paris alone. How great must be the number of persons living by the same cultivation over the rest of France! The knowledge required for a proper culture of the fruit garden must be extensive and profound. The first step is, to study the nature of the soil, in order not to plant all trees indiscriminately, but to give to each spot the tree which will thrive there best. Great discoveries and improvements have taken place, within the last few

years, with respect to fruit trees. The gardens of Versailles, Montreuil, Fromont, Vaux, Surennes, Celle, Glissoles, Esmerly, &c. &c., are so many schools where numerous pupils have been instructed, who now devote themselves to this branch of the science with the utmost success. Were I to name all those in France who are famed for their zeal and knowledge as fruit producers, my time would extend too far. I may, however, speak of those known to all Paris, and quote the names of Lefebvre of Montreuil-aux-Pêches, Jamain, Sageret, Rendu, Duvillers, Barbot, Tollard, Bossin, and Vilmorin, all remarkable for their knowledge in horticulture.

"I arrive, at last, to the flower gardens,—the most admired of all—the seat of the graces, of pleasure and delight. Flowers, at present, are an absolute necessity. The child plays with them, the young girl crowns her fair brow with them, and age finds an indescribable charm in cultivating them. Run through our flower markets: from morn till evening see all ages come to choose, according to their state of life, such flowers as their means will allow them to indulge in. More than two hundred florists in Paris, or its immediate neighborhood, supply the wants of the inhabitants. It is particularly on the occasion of some great fête, such as that of the Virgin, of St. Louis, of St. John, or St. Peter, that the activity of our gardeners is worthy of admiration. At the last fête of the Virgin I can state, positively, *that more than fifty thousand francs' worth (£2000) of flowers were sold in Paris.* 'It is for our subsistence,' said an old gardener, 'that the kind Virgin sends us the flowers we have cultivated to do her honor.' Yet, notwithstanding this absolute luxury of flowers, it is to be lamented that our flower sellers have no place assigned them which can keep out the weather. They are obliged to attend to their traffic, exposed to all the seasons as they come round. Who does not recollect the fête of the Virgin some years back, which was interrupted by one of the most terrible storms of the year? Down came the rain, and a scene of disaster disfigured the place, which, a few minutes before, was so richly ornamented by flowers. The hopes of many a florist were destroyed, and property to a vast amount was lost forever. Yet, up to the present time, a covered market is asked for in vain, and another unexpected storm may again destroy a brilliant collection of flowers."

The secretary then read his report, which was of great length, and most ably drawn up. After rapidly referring to the various plants in the exhibition, he proceeded to touch on those which had made a considerable progress since the year before. He first referred to the mulberry trees, which M. Perrotet had, some years back, brought from China. They had been very extensively cultivated, but not in the same degree as it was hoped another variety was likely to be, the buds of which M. Hebert had brought from the northern provinces of China, where it grows naturally in the open air. These had been put down at the experimental farm of Bergeries, and gave every prospect of complete success. The Minister of Agriculture had committed these precious objects to the care of M. Camille Beauvais, which was a guarantee that care and intelligence would be used in their culture.

The same Minister had commissioned M. Guillemin to proceed to Brazil, to study the culture and preparation of tea, and to bring back a certain number of plants to France. His mission had completely succeeded. He visited all the farms in the provinces of Rio Janeiro and St. Paul, where tea was cultivated. He found some very fine

pieces of cultivation in St. Paul, where tea is so extensively cultivated, as to suffice for all the wants of the Brazilian empire, if the price of labor was not so exceedingly elevated, as to make the tea dearer than that from China. M. Guillemin not only studied all proceedings with respect to its culture and fabrication, but made himself also acquainted with the questions which have an influence on the return of produce. He feels satisfied that, with free labor and the improvements in machinery of the present day, tea may be manufactured in France at one third of the price that it costs in Brazil. Unfortunately a great number of the plants which he brought with him perished on the passage. A sufficient number were preserved, which have been placed in the Jardin des Plantes. To the qualities which render tea wholesome and digestive, it adds another—that of preserving the laboring classes from the ill effects of certain employments, as was observed by the Abbé Voisin in the rice plantations of China. M. Guillemin has also brought back eighty-nine varieties of rare plants, which are placed in the king's garden, as well as a fine collection of orchidaceous plants, gathered on a Sierra of the Cordillera mountains. The secretary then lamented the premature deaths of two learned botanists in foreign countries. One was Dr. Busseuil, surgeon in the French marine, who, after having visited China in the interests of science, was carried off by a fever at Goree. The other was Dr. Betoro, of Piedmont, who, after having explored the Antilles, and a great part of South America, had been shipwrecked on his way to Othheite, and lost. The secretary, also, had to deplore the death of the English traveller, Douglas, who, in his career, had enriched horticulture with so many vegetables. He perished miserably in the Sandwich Islands, whilst collecting the natural flowers of the country. He suddenly fell into one of the covered pits made for catching wild beasts. He was literally trampled to pieces by the animal which was in the trap at the time. The secretary then alluded to the improved practices introduced, or more generally practised, since their last annual meeting. Artificial fecundation had become a great source of profit to the florists. Hybridism had diffused an extraordinary variety; camellias, rhododendrons, azaleas, and dahlias, had been exceedingly extended; and with respect to roses, the varieties seemed endless. The secretary then alluded to the different horticultural societies throughout the kingdom, which had increased in importance during the year. He also spoke in complimentary terms of the great houses, which had gained a name by their success in horticultural pursuits, and alluded to particular objects to which certain cultivators had particularly devoted themselves. Thus Vi-comte Debonnaire de Gif had used glass coverings to increase the size and flavor of artichokes, and Dr. Merat had employed coverings of black canvass for the same purpose. The Comte de Lasteyrie had communicated the means of preserving stone fruit; and M. Loiseleur Deslongchamps a mode of preserving any sort in an ice-house. M. Lefebvre had discovered a late peach, which ripens in October or November. It was, on the contrary, to the early ripening of fruits, that M. Chalon had directed his labors. He was able to hasten grapes, growing on trellises, by means of semi-circular tiles painted black. M. Jacquim had improved, in a high degree, on chicory, cultivated in gardens; and M. Vilmorin had pursued a series of experiments on carrots, taken from the wild state, and had produced a marked improvement.

The secretary then alluded to the great progress which dahlias had made since the year before, and mentioned that there was some intention of holding special shows for that flower. He then launched forth into an eloquent eulogium on the science of horticulture. He, at considerable length, expatiated on its importance, and then sketched its rise and progress down to the present day. Amongst other matters, he alluded to the singular group of oak trees in the sands of Gondreville, known by the name of *The fourteen brethren of the desert of Tour-de-Grain*. These were originally fourteen, but are now reduced to eleven. Thirteen of them, about two hundred years ago, took their root around, and one in the centre, of an old stock, aged at least one thousand years, growing on a tomb. The old tree was contemporary with Louis le Debonnaire, or perhaps with Charlemagne. It witnessed, successively, the disturbances of the Truands—the amours of Francis the First with the Duchess d'Etampes—the meeting of the army of this prince with that of Charles V., separated soon after by the peace of Crepy (1544)—more than once struck with lightning—it had also to endure the anger of Cardinal Richelieu, who associated it in his vengeance with the revolvers who met under its peaceful shade. Louis XIII. caused it to be cut down, and yet it witnessed, in 1652, the meeting of those parties which divided the Court under Cardinal Mazarin, and the dispersion of the army by Turenne. The present group, which is now so much admired, was the favorite hunting rendezvous of the Duke of Orleans, the father of the present king. The secretary concluded by speaking favorably of some of the periodical works of horticulture, published in France, and by wishing every prosperity to the science. (*Hort. Jour.*)

ART. III. Domestic Notices.

Echinocactus Eyriésii.—On Saturday, April 25th, I noticed this beautiful plant in flower at the green-house of Mr. Francis Putnam. Several of the plants have flowered in the neighborhood of Boston and New York, during the few previous seasons past; but this is the first time it has flowered in this vicinity.

The following is the memoranda of the progress of this plant from the time the buds became visible. About the first of March there appeared nearly on the top of the stem three woolly protuberances, which were considered to be buds; at first they made very slow progress, but, during the few days previous to flowering, their growth was very rapid. The flowers began to unfold on Friday afternoon, (April 24th,) about 5 o'clock, and was fully expanded at nine in the evening. It continued so until late in the afternoon of the next day, when they gradually closed. There are two or three more woolly protuberances on the same plants, which are probably flower buds.

The flower measured about nine inches from the base of the tube to the tip of the petals. The tube is funnel shaped, of a greyish green color, covered at short distances with tufts of blackish hairs. The petals are very numerous, about forty in number, lanceolate, acuminate, and of the most spotless and delicate white. The stamens are exceedingly numerous, anthers of a pale straw color. It exhales one

of the most rich and delicious odors in the vegetable world, partaking of the fragrance of the orange flower, which many think it even surpasses.—*Y., Salem, April, 1840.*

Great Product from one quarter of an acre of ground.—Sir, from one quarter of an acre I grew, (the summer of 1839.)

- | | |
|---|---|
| 18,350 Plants of green and brown Kale, Cauliflower, Brocoli, early York, Savoy, Drumhead, Thousand-headed, and red Cabbage. | 177 summer Squashes, 3 varieties. |
| 4 varieties Tomatoes. | 30 winter Squashes, 5 varieties. |
| 10,000 rose and white solid Celery plants. | 6 Citron Melons. |
| 400 purple and white Egg plants. | 26 Water Melons. |
| 1,000 heads Lettuce, four varieties. | 73 Musk Melons. |
| 600 do. Endive, ten varieties. | 225 Cucumbers for pickle, from one vine. |
| 5 sowings of Cress. | 50 large Cucumbers. |
| 5 bushels Spinach, three varieties. | 100 wild Gherkins. |
| 1000 Radishes. | 2 quarts Nasturtium. |
| 1 bushel Kale Sprouts. | $\frac{1}{4}$ bushel Peaches. |
| 16 $\frac{1}{2}$ bushels green Peas, three varieties. | 150 Okra Pods. |
| 3 bushels broad Windsor Beans, in pod. | 416 heads Cabbage Kale. |
| 2 do. String Beans. | 55 heads Cauliflower and Brocoli. |
| 15 $\frac{1}{2}$ bushels Lima Beans. | 455 purple Eggs. |
| 4 $\frac{1}{2}$ bushels Potatoes, six varieties. | 6 white do. |
| 3 do. sweet Potatoe. | 1 quart scarlet and white runner Beans. |
| 2 $\frac{1}{2}$ do. Beets. | 10 hills Globe and Cardoon Artichoke. |
| 1 $\frac{1}{2}$ do Carrots. | 50 mock orange Pears. |
| 4 do. Parsnip. | 13 quarts seed Peas. |
| $\frac{1}{2}$ do. Skirret. | 21 quarts Lima Beans for seed. |
| $\frac{1}{2}$ do. Scorzonera. | 32 ounces Egg Plant seed. |
| 12 $\frac{1}{2}$ do. Turnips, three varieties. | 7 $\frac{1}{2}$ lbs Tomato seed. |
| 1 do. Ruta Baga Turnip. | 4 ounces Celery seed. |
| 23 $\frac{1}{2}$ bushels of ripe Tomatoes. | 16 ounces sundry seeds—Sage, Savoy, sweet Marjoram, Thyme, Parsley, Bene Plant, &c. &c. |
| 7 bushels green Tomatoes. | 18 varieties of Dahlias. |
| 650 ears Corn, five varieties. | 70 do. of Flowers |
| | 2000 heads Celery—about 1500 of them fine large heads. |

I had a man to work *only one week*—I did all the rest myself. I was in my garden at day-light, worked till eight, nine or ten, then dressed and *walked* to Wall Street, about two miles, then home at two to four, and worked till eight in the evening, then into a warm bath, and read my evening papers in bed.

This was my second year of gardening for more than *twenty years*! Should any of your horticultural friends doubt my statement, I will explain to them how I obtained such a *quantity* from so small a piece of ground.—*Yours, very respectfully, L. Vaughan, Williamsburgh, N. Y., May, 1840.*

[We shall be glad to receive from our correspondent the method in which he was enabled to reap such an abundant crop from so small a space of ground. Many persons imagine that half an acre will not produce sufficient to pay for manuring and cultivating the land. We hope, however, that the above statement of Mr. Vaughan

will convince those who entertain such an opinion, that they are mistaken.—*Ed.*]

Ribes sanguineum, the crimson flowering currant, and *Wistaria Consequana*, the Chinese Wistaria, are decidedly the two finest hardy plants which have been introduced of late years. The former stood the past winter well (though the thermometer indicated six below zero of Fahrenheit,) and has been in bloom for the last three weeks. The Chinese Wistaria seems perfectly hardy, and is truly one of the loveliest of climbing plants. A specimen trained on the front of the foreman's house here, covering about one hundred square feet, is now loaded with pendulous clusters of its delicate purplish lilac blossoms, some of them a foot in length. From the facility with which we propagate this climber now, and its great beauty, we hope soon to see it training round the porch and over the trellis of every cottage.—*A. J. Downing, Botanic Garden and Nurseries, Newburgh, N. Y., 11th May, 1840.*

Buist's "American Flower Garden Directory."—It gives us much pleasure to meet with a work on horticulture like the present. While it contains ample directions for conducting the operations of the flower garden and green-house shrubbery throughout the whole year, it at the same time furnishes descriptive lists of the finest species and varieties of plants calculated to ornament the flower garden in all its departments,—lists down to the present time, and comprising, as for example, in the selection of roses, only the very finest and most superb sorts, and rejecting every thing inferior, though often heretofore praised and sold under high sounding names. Mr. Buist, (unlike some of our gardening authors,) has given directions suited to our *American climate*, not borrowed from European works. In short, he has told us what he has seen and practised, not what is the current theory. In his description of plants he has the independence (unfortunately rare among nurserymen,) to say at once what is second rate, or unworthy of cultivation, or to expose an old plant selling under some new title. This volume (we refer to the last edition, 1839,) is, on the whole, the most original one on American horticulture that has yet been published, and we are therefore gratified to see it obtaining so extensive a circulation.—*A. J. Downing.*

Production of Silk in Georgia.—The mulberry business is quite still now; several gentlemen, however, are going ahead with the silk business, extending their plantations of trees and building cocooneries, intending to feed this season a million of worms, or more. I design, myself, to feed some, but probably not over one hundred thousand. The leaves are out now, the second time after having once been cut off by the frost, as large as a dollar. The season has been altogether an extraordinary one. I have kept a calendar of Flora, and, if you think it worth the notice, will send a synopsis of it for your Magazine.—*M. A. W., Athens, Ga., April, 1840.* [We shall be very glad to receive our correspondent's favors.—*Ed.*]

Precocity of vegetation.—March 5th, *Poa annua* in blossom on a sunny bank; March 9th, *Corylus americana*. Cooler weather succeeding, the present state of the season is not very advanced. Sixteen species of shrubs and of flowers have occurred in my notice, in flower at this date, (April 22d,) in the vicinity of—*Chelmsford.*

Keeping detached beds of male and female Strawberry Plants.—I am endeavoring to keep detached lots of male and female plants of strawberries, so as to fill orders with a suitable number of each, as the males produce no fruit, and consequently grow much stronger

than the females, and overrun the beds, rendering them unproductive: this I think may be prevented by planting *one* male only, to fifteen or twenty females, and by having the former labelled, the runners could be kept shortened, thereby giving the female plants the ascendancy in growth.—*Yours, R. Sinclair, Sen. Claremont Nursery, near Baltimore, May, 1840.*

Mr. Sinclair's plan is an exceedingly good one, and we would recommend other nurserymen to adopt it. We know that the Down-ton and some other varieties are often thrown away from the barrenness of the vines, the male plants overrunning the beds, and, by their excess of vigor, rooting out all the female plants, and many cultivators know not to what cause to attribute their unproductiveness. But by purchasing the two sexes separate, and planting in the proportions and following the directions above named, there need be no fear of their producing an abundant crop.—*Ed.*

Premium for the destruction of the rose slug.—At a late stated meeting of the Massachusetts Horticultural Society, it was voted, that a premium of twenty dollars be awarded to the person who shall discover the most speedy and effectual mode of destroying the slug which infests rose bushes, destroying the entire foliage of the plants. The Society were prompted to this step by the liberality of T. Lee, Esq., a gentleman who has done much to advance floriculture, who contributed one half of the amount of the above premium. We hope that experiments will be made, and, if possible, some effectual method discovered, by which these pestiferous insects can be prevented from completely destroying the beauty of one of the greatest ornamental shrubs of the garden; unless they can be got rid of, it will be almost useless to attempt the cultivation of fine collections of roses. We invite the attention of amateurs and others to the subject, and hope they will be induced to institute experiments, some one of which may prove effectual.—*Ed.*

Gardening in Louisville, Ky.—I commenced a garden in this city, for the sale of plants, flowers, &c., four years since. There seems to be a growing taste here for ornamental gardening, though there has, at yet, but little been done. I have a great variety of plants in my collection, embracing many of the most choice sorts, both hardy and exotic. There are four or five green-houses in this city, in a small way, but they are improving. There are a large number of beautiful indigenous trees in this State; among others, the *Magnolia tripetala*, *macrophylla*, *acuminata* and *cordata*; and the *Gymnocladus canadensis*.—*E. Wilson, Louisville, Ky., April, 1840.*

Double variety of the Rosa rubifolia.—There is a fine double variety of the *Rosa rubifolia*, a native of this State. It is called the Kentucky multiflora here: it fully equals the celebrated Greville rose in appearance, and the plant is superior, both as respects its vigor and hardness.—*Id.*

Ipomopsis elegans.—One of the finest biennial plants which we possess is the *Ipomopsis elegans*. We have it in cultivation in abundance.—*Id.*

Premiums offered by the Middlesex Horticultural Society, for 1840.—In our last volume, (V., p. 467,) we published the list of premiums offered by this new society, for the year 1840. We would again remind our friends, especially those who reside in Middlesex county, of the exhibitions which are to take place, and the liberal premiums to be distributed to those who are successful competitors. Did our limits allow, we would republish the list, in order that it

might be the means of drawing attention to the subject; but we have no space to do so. Among the flowers, roses receive liberal encouragement, there being two prizes, one of four dollars, and one of three dollars. The show for them and pinks will probably take place about the 27th of this month.—*Ed.*

Mr. Walker's Tulip Show.—The annual exhibition of Mr. Walker's superb collection of tulips took place at the Public Garden, in Boston, on May the 17th, and was to be continued until the 30th of the month. The weather, during the first week, was cold, with raw easterly winds and rain, which prevented a full attendance of visitors. The second week was delightful, and the exhibition was crowded up to the time we last saw it.

The show, this season, was much more splendid than the last; many new and very fine sorts have been added to the collection, and the whole number of bulbs planted out this year exceeds three thousand. The bed is one hundred feet long, and four wide.

We made some mention of the arrangement which Mr. Walker had made with the proprietors, for the planting out of the bulbs in the fall, (Vol. V. p. 447.) We are glad to learn from Mr. Walker that, so far, the experiment may be considered successful, and that the patronage is sufficient to warrant the planting of the bulbs in the same situation the coming fall.

The bulbs looked exceedingly well grown, and the colors very even: some of the Bybloemens were extremely fine. The best kinds are still those which we have before noticed, (V. p. 218.)

We cannot help repeating our conviction, that the establishment of Mr. Walker's tulip show, where it can be so readily seen by strangers, will tend more to create a taste for the tulip than any other means which could be devised. A gorgeous array of such brilliant colors as greeted the eye, could not fail to create a sensation, in the beholder, which few other plants are capable of producing. Almost every one possesses a latent love for plants; but some such uncommon display is often needed, to rouse it into action. We well remember when the inspection of a small tulip bed revived anew the feelings with which we culled the modest snow-drop, that harbinger of spring, in our youth, and our first object was to possess a bed as brilliant as that which so riveted our attention. Lovers as we are of the tulip, we could wish that there were many more amateur collections of this gorgeous flower to be found in our vicinity.

Mr. Walker's display of pansies, at his garden in Roxbury, has been equally as extensive and beautiful as his exhibition of tulips in the city. He has shown, the present season, some of the very finest specimens we have ever seen. He carried off the prize at the late show at the Massachusetts Horticultural Society's Rooms, and one of his seedling flowers possesses surpassing qualities. We trust he will name them, and increase them so as to supply amateurs, who are desirous of possessing a few superior kinds, with plants. Mr. Walker's whole collection comprises some three thousand plants.—*Ed.*

Echinocactus Eyræii is now flowering in our collection. The plant has now upon it ten fine buds, which will expand in the course of the next fortnight.—*Ed.*

The Geraniums at the Conservatory are now in full bloom: several of Mr. Donald's seedlings are very beautiful; we intend, in a future number, to describe all the best.—*Ed.*

Wistaria Consequana, at Mr. Cushing's, is now throwing out a second crop of its beautiful pale blush lilac, odoriferous blossoms. At the

nursery of W. Kenrick, Newton, a large plant is in full flower, in the open air, where it has stood out four or five years.—*Ed.*

ART. IV. *Retrospective Criticism.*

Errata.—In our last, at p. 186, six lines from the bottom, for "Ice-land Moss," read "Dwarf stone crop,"—an error which escaped our attention, until too late for correction.

The large Camellia, in the collection of the late M. Noisette, Charleston, S. C.—Sir,—In the April No. 1839, of your very useful and instructive Magazine, I find a camellia of gigantic size described. You seem to think this may be the plant alluded to by me in Vol. 7 of *Loudon's Gardener's Magazine*, then the property of my friend, the late M. Noisette. Whether you are correct in your inference or not, I am not able to say, not having learned who became the possessor of the grounds of that gentleman after his decease; but I am under the impression M. Noisette's camellia was killed by the unusually severe frost which visited that country in the month of February, 1835. I know, from authentic information, that a great number of M. Noisette's most valuable plants suffered at that period; and, if my memory is correct, the splendid specimen of the camellia was among the number of losses, a circumstance deeply to be deplored. The result of those losses was fatal to poor Noisette; he allowed the loss of his magnificent specimens to prey so much on his mind, that it ultimately put a period to his existence, by his own rashness, when in a state of delirium. M. Noisette was a good practical botanist, intimately acquainted with the botanical treasures of the south, as well as with those of other climes, he and his brother, the celebrated nurseryman at Paris, having been specially employed by Bonaparte to accompany his army in the Egyptian and other expeditions, to examine and collect the various plants which came under their notice—a convincing proof that he, Bonaparte, did not allow the conflicts and turmoils of war to absorb his attention in toto.

In your editorial remarks, respecting the camellia in Col. Lucas's garden, you say, "If the double and fine varieties of the camellia should prove as hardy as the single, and can be as successfully cultivated, they must add greatly to the splendor of the flower garden." It is with great pleasure I am able to inform you, I have repeatedly seen the double varieties growing in the southern states, with a degree of vigor, and showing a profusion of blossom which rendered them a perfect picture. In the gardens of the late Lewis Le Conte, Esq., near Riceboro', Ga., I saw some fine specimens of the double white, double striped, &c. &c., which had been grown from small plants in the open air, the former about eight feet high, and eighteen or twenty feet in circumference; these plants presented a perfect picture of symmetry, and were, I well recollect, one mass of blossom on the 1st of January, 1835. During the severe frost above alluded to, I was on a visit to this gentleman's place; the mercury stood at 6° above zero at sun-rise, but on the evening previous some blankets had been thrown over the principal part of the camellias, and only a

few leaves suffered, and that in a very trifling degree. It would, I imagine, be highly gratifying to several of your readers to learn the size of those plants at this period, for in the rapid vegetation of the south five years makes a vast difference in a flourishing tree. Probably your correspondent, Augustus S. Oemler, Esq., Savannah, would oblige your readers with the desired information. I know Mr. Oemler to be a gentleman ever alive to every subject connected with botany or floriculture, and it is to be regretted his name is not more frequently found in the periodicals of the day.

While on subjects connected with the south, I may mention the paucity of well cultivated gardens is a circumstance truly lamentable. With a climate so peculiarly favorable for many genera and species, what a display might be effected by a judicious selection and proper culture. I will instance the natural order *Amaryllidaceæ*,—a group of plants so lovely, that even angels might admire. This splendid family presents to the view a singular uniformity of foliage, while their corollas vary into almost every susceptible tint of shade, and their fragrance will vie with the most odoriferous of our garden favorites. The garden of my valued friend, the late Lewis Le Conte, Esq., presented a convincing proof how peculiarly they were adapted for southern gardens. The bulbs attain an astonishing size, with a corresponding magnitude in the size and number of their blossoms. I have seen from six to ten offsets, taken from an *Amaryllis Johnsonii*, each offset measuring from fifteen to twenty inches in circumference. In 1832, while in London, I purchased every desirable species and variety of the *Amaryllis*, *Pancratium*, *Crinum*, &c. &c. for the late Thomas Young, Esq., Savannah, who breathed his last as the magnificent collection was within a few hundred yards of their destination. In this gentleman, botany and floriculture lost a fervent patron, who used every effort to promote the interests of gardening, both by precept and example. Had he lived until now, what a splendid display those bulbs would have made; but after his lamented death, his gardens, with their unrivalled riches, were allowed to run into luxuriant wildness.

At some future time, should you desire it, I may resume this subject, with some remarks on southern plants, which really merit the attention of every worshipper of Flora.—*Sir, I am, very respectfully, Yours, &c., Alexander Gordon, Brookline, May 4, 1840.*

ART. V. *Massachusetts Horticultural Society.*

Saturday, April 25, 1840.—A stated meeting was held this day. T. Lee, Esq., proposed to the Society the importance of awarding a small premium for the purpose of inducing cultivators to discover some effectual method of destroying the rose slug, which infests the rose bush. He accompanied his proposal with an offer to contribute ten dollars for that object. The Society, viewing the matter as one of much consequence, voted to add an equal amount, making the whole premium twenty dollars,—a liberal amount, and which, we trust, will excite cultivators to detect some safe remedy, by which the plants may be guarded from the voracious ravages of the slug.

The Committee on Vegetables reported that they had prepared a list of premiums for 1840, which is as follows:—

ASPARAGUS—For the earliest and best four bunches . . .	\$3 00
BEANS—For Large Lima, best two quarts, shelled . . .	3 00
For Early Dwarf, best two quarts, shelled . . .	2 00
BROCOLI—For the best four heads . . .	3 00
BEETS—For the best twelve roots . . .	2 00
CABBAGES—For the best six heads . . .	2 00
CARROTS—For the best twelve roots . . .	2 00
CAULIFLOWERS—For the best four heads . . .	3 00
CELERY—For the best six roots in the season . . .	2 00
CORN—For boiling, earliest and best . . .	2 00
CUCUMBERS—For the best three pair before the first Saturday in June . . .	4 00
LETTUCE—For the finest six heads in season . . .	2 00
PEAS—For the best specimen, of half a bushel, before the second Saturday in July . . .	4 00
POTATOES—For the earliest and best peck . . .	2 00
RHUBARB—For the best dozen spears . . .	3 00
SQUASHES—For summer, the earliest and best dozen . . .	2 00
For winter, best for the season . . .	3 00
TOMATOES—For the best and earliest dozen . . .	2 00
EGG PLANTS—For the best specimen . . .	2 00
BRUSSELS SPROUTS—For the best specimen . . .	2 00

At a meeting previous to the present, the Society voted to give the flower, fruit, and vegetable committees the sum of three hundred dollars, for premiums for the year 1840, to be divided among the respective committees as follows: Flower Committee, \$125,—Fruit Committee, \$125,—Vegetable Committee, \$50: the amount for the Flower Committee should have been at least \$200. The Committee, we hope, through its chairman, will, at some future meeting, ask for an additional amount, equal to that sum.

May 2d.—Exhibited. A variety of cut flowers from T. Lee, Esq.

May 9th.—Exhibited. A fine collection of hyacinths from Joseph Breck & Co.; cut flowers from T. Lee, Esq.

May 16th.—Exhibited. A fine collection of hyacinths, comprising several varieties, from Joseph Breck & Co.

The Committee on Flowers held an adjourned meeting this day, for the purpose of preparing a list of premiums for the year 1840. The business of the Committee not being completed, the meeting was adjourned for one week, (May 23d,) at which time the first show for the season will take place, and the prizes awarded for geraniums, pansies and tulips.

May 23d.—Exhibited. Flowers: From T. Lee, Esq., elegant specimens of the white Noisette Bourbon rose, with upwards of twenty flowers expanded; *Clarkia pulchella*, and *pulchella alba*, *Oenothera Lindleyana*, *Leptosiphon densiflorus*, *Málope trifida* var. *grandiflora*, and *grandiflora alba*, *Eutoda viscida* (beautiful), *Phlox Drummondii*, *Kaulfussia amelloides*, *Scabiosa grandiflora*, and *Chrysanthemum tricolor*; all grown in pots in the green-house; also, *Russelia júncea*, *Rhéxia virginica* (a fine specimen,) a white dahlia, a handsome yellow species of broom, very fragrant, the yellow Noisette rose, and *Campánula rapunculoides*. From W. Kenrick, bouquets and a superb specimen of the *Wistaria Consequana*, cut from a plant which has stood out in the open air several winters. From J. Hovey, bouquets. From Joseph Breck & Co. superb specimens of *Dodecatheon Meadia* and *integrifolia*, *Phlox repens* and *divaricata*, *Lychnis Flosculi*, *pæonies*, *Ranunculus* sp. *pleno*, and some very handsome pansies.

From S. Walker, twelve fine tulips, a splendid collection of pansies and bouquets. From S. Johnson, handsome tulips. From W. Miller, geraniums, fine pansies and bouquets. From J. Donald, several fine geraniums in pots, and, among them, seedlings of great beauty. From A. Bowditch, a beautiful collection of geraniums in pots. From Messrs. Winship, a plant of *Lonicera caucasicum*, taken up from the ground, and laden with its fine white blossoms: it is decidedly one of the most ornamental shrubs that can be planted.

Native Plants:—From a lady, viz: *Arethusa bulbosa*, *Senecio aureus* and *obovatus*, *Krigia virginica*, *Gnaphalium plantaginum*, *Hypoxis erecta*, *Convallaria racemosa*, *Geranium maculatum*, *Houstonia cœrulea*, *Andrœmeda calyculata*, *Arbutus Uva ursi*, *Berberis vulgaris*, *Silene pennsylvanica*, *Prunus obovata* and *borealis*, *Aquilegia canadensis*, *Thalictrum didicum*, *Anemone thalictroides* and *nemorosa*, *Viola pedata*.

Fruit:—From J. P. Cushing, Esq., superior specimens of black Hamburg, white Muscat, Grizzly Frontignac, Golden Chasselas, Chasselas de Low and Sweetwater, ripened in the stove.

Vegetables:—Cucumbers, from J. L. L. F. Warren.

The judges for awarding premiums for tulips, geraniums and pansies, exhibited at this meeting, made their report as follows:—

TULIPS.—For the best twelve blooms, S. Walker.

For the second best twelve blooms, S. R. Johnson.

The following are the names of the best twelve blooms:—

Bybloemens: Sherwood's dark rose, Violet pucelle, Matilda, Cicero, Rose Maria, Adelaide, Princess Charlotte Cenotaph, Duchess of Kent. Bizarres: Platoff, Sir E. Neagle, Comet.

Messrs. D. Haggerston and W. Meller, judges.

GERANIUMS.—For the best six plants in bloom, in pots, A. Bowditch.

For the next best six plants, in bloom in pots, W. Meller.

Messrs. D. Haggerston and J. Breck, judges.

PANSIES.—For the best twelve flowers, to S. Walker.

For the best six flowers, to W. Meller.

For the best seedling, to S. Walker.

Messrs. S. R. Johnson and D. Haggerston, judges.

The Committee on Flowers, who adjourned to this day, completed their report on premiums for the present year. C. M. Hovey was appointed Secretary for the Committee to report the rules and regulations adopted. The report, which had been prepared by the Secretary and read by him at a previous meeting, was then taken up and acted upon; and the Committee unanimously voted that the exhibitions for premiums, the present season, should be established in the following manner.

There shall be an exhibition for premiums in each month, during May, June, July, August and September, and the different plants and flowers exhibited, at the several meetings as follows:—

First Show, Saturday, May 23d.

The exhibition of geraniums, pansies, and tulips takes place this day, and prizes to be awarded as follows:—

HYACINTHS.—For the best display of flowers . . . \$5 00

TULIPS.—For the best twelve dissimilar blooms . . . 10 00

For the second best twelve dissimilar blooms . . . 5 00

PANSIES.—For the best twelve different varieties, a premium of . . . 5 00

For the best six different varieties . . . 3 00

For the best seedling . . . 2 00

GERANIUMS.—For the best six plants in pots, in flower	5 00
For the second best six plants, in pots, in flower	3 00
For the best seedling in flower	3 00

*Second Show, Saturday, June —.**

The exhibition for premiums, at this meeting, comprises roses, pinks, and peonies, as follows:—

ROSES.—For the best fifty cut flowers	8 00
For the second best fifty flowers	5 00
For the best display of Chinese and other tender kinds	5 00
PINKS.—For the best display of flowers	5 00
For the best six dissimilar flowers	3 00
For the best seedling	2 00
PEONIES, (herbaceous.)—For the best display of flowers	5 00
For the second best display of flowers	3 00
For the best seedling	2 00

Third Show, Saturday, July —.

This exhibition is for carnations alone.

CARNATIONS.—For the best display	5 00
For the second best display	3 00

Fourth Show, Saturday, August —.

This exhibition is for German asters, perennial plants, and annuals, as follows:—

GERMAN ASTERS.—For the best display of cut flowers	5 00
For the second best display of cut flowers	3 00
PERENNIAL PLANTS (herbaceous.)—For the best display	3 00
For the second best display	2 00
ANNUALS.—For the best display	3 00
For the second best display	2 00

Fifth Show, Saturday, Sept. —.

Dahlias only to be competed for, as follows:—

PREMIER PRIZE—six dissimilar blooms	15 00
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The premier prize open to all cultivators.

In order that amateur growers may compete with success, the principal prizes are divided into two divisions, viz:—

To all growers of more than two hundred Plants, in classes, as follows:

First Class.—The best twenty-four dissimilar blooms	8 00
The second best twenty-four dissimilar blooms	6 00
Second Class.—The best twelve dissimilar blooms	6 00
The second best twelve dissimilar blooms	4 00
Third Class.—The best six dissimilar blooms	4 00
The second best six dissimilar blooms	2 00

To all growers of less than two hundred Plants, in classes, as follows:

First Class.—The best twenty-four dissimilar blooms	8 00
The second best twenty-four dissimilar blooms	6 00
Second Class.—The best twelve dissimilar blooms	6 00
The second best twelve dissimilar blooms	4 00
Third Class.—The best six dissimilar blooms	4 00
The second best six dissimilar blooms	2 00
BEST SINGLE BLOOM.—A prize for the best single bloom, open to all cultivators	5 00
BEST SEEDLING.—For the best seedling, a prize, open to all cultivators	5 00

* The Chairman to give a fortnight's notice of the day of each of the exhibitions, as the earliness or lateness of the season may require.

The following rules and regulations will be strictly observed in the exhibition of the flowers:—

1. All growers who intend to exhibit, shall signify their intention to the Chairman of the Committee on Flowers, and in which class or classes, on or before the third Saturday in August.

2. Any persons may enter for the prizes of any of the classes, in either of the divisions to which they are eligible, but they cannot take more than one prize in either of the two divisions.

3. Each competitor will be required to declare that every flower exhibited by him is of his own growth, or has been grown under his care.

4. The judges for awarding the prizes in the first division shall be selected from such cultivators or connoisseurs as are not competitors in that division; and the same rule shall be observed in selecting judges for the second division.

5. The judges to be appointed by a majority of the exhibitors, whose decision shall be final, and to be chosen at the Society's room on the first Saturday in September, at twelve o'clock, noon. Notice of this meeting to be given by the Chairman of the Flower Committee to such persons as have signified their intentions of competing for the premiums.

6. Each competitor shall give to the Chairman of the Flower Committee a list of the names of the flowers he exhibits, sealed up and signed with his name.

7. The blooms shall be shown in bottles provided by the Society, without foliage or any other embellishment.

8. No seedling, not sold out, will be allowed to be placed in either of the divisions or classes, except the seedling class; nor must any stand contain two blooms of the same variety.

9. Seedlings deemed worthy to obtain a prize shall exhibit something *new in character or color*, or be *unexceptionable in form*.

10. The judges shall sign their award with a declaration, upon their honor, that, to the best of their knowledge, they have decided upon the respective merits of the flowers exhibited.

These constitute the whole of the prizes proposed by the Committee for the present year; there are other kinds of plants and flowers, which need a liberal encouragement; and it is hoped that another season, by an increase of funds for distribution as premiums, much good may result by offering prizes for various other objects.

The following general regulations, for the government of the monthly exhibitions, and which it is wished would be observed at every weekly show, were passed unanimously by the Committee:—

1. All plants and flowers intended for exhibition for prizes, shall be in the Society's room by half past ten o'clock in the morning; and all exhibitors who have not their plants or flowers in place at that time, will be excluded from competition.

2. All specimens exhibited shall remain untouched until a quarter before two, P. M., when they will be delivered into the care of the owners, who are respectfully requested not to give away their flowers in the room, as it has been the cause of much confusion and inconvenience.

3. The judges shall enter the room and decide upon the merits of the flowers &c. at twelve o'clock, and their award shall be declared by the Chairman of the Committee, the same day, at one o'clock.

4. Judges shall be appointed from such persons as are not exhibitors; and their decision shall be final. They have power to give discretionary premiums for subjects of real value, which may not be specified in the list of prizes.

5. Exhibitors shall signify their intention of exhibiting to the Chairman, one week before the day of meeting, in order that proper preparation may be made for the display of the plants and flowers.

ART. VI. Faneuil Hall Market.

Roots, Tubers, &c.		From	To	Squashes and Pumpkins.		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Squashes, per cwt:			
Chenangoes, } per barrel,	1 25	1 50		Winter crook neck,.....	—	—	
} per bushel,	50	—		Autumnal Marrow,.....	—	—	
Common, } per barrel, ..	1 00	1 25		Canada crook neck,.....	5 00	6 00	
} per bushel, ..	50	—		West India,.....	2 00	3 00	
Eastports, } per barrel, ..	2 25	2 50		Pumpkins, each.....	20	25	
} per bushel, ..	1 00	—					
Turnips:				Fruits.			
Common, per bushel,.....	75	1 00		Apples, dessert, new:			
Ruta Baga, per bushel,...	87½	50		Common, } per barrel,...	—	—	
Onions:				} per bushel,...	1 00	—	
New white, per bunch,...	5	6		Russets, } per barrel,.....	3 50	4 00	
Red, per bunch,.....	3	4		} per bushel,...	1 50	—	
White, per bunch,.....	2	3		Baldwins, } per barrel,...	4 00	5 00	
Yellow, per bushel,.....	75	1 00		} per bushel,...	1 50	—	
Beets, per bushel,.....	75	1 00		Greenings, per barrel,...	—	—	
Carrots, per bushel,.....	75	1 00		Pearmain, per barrel,...	—	—	
Parsnips, per dozen,.....	25	—		Sweet, per barrel,.....	—	—	
Horseradish, per pound, ..	10	12		Lady Apples, per bushel, ..	—	—	
Scarlet short-top,.....	4	6		Dried apples, per pound, ..	7½	9	
Shallots, per pound,.....	20	—		Strawberries:			
Garlic, per pound,.....	12½	—		Common, per box,.....	37½	50	
Cabbages, Salads, &c.				Cherries, per quart,.....	33	—	
Cabbages, per dozen:				Pears:			
Drumhead,.....	75	1 00		Baking, per bushel,.....	2 00	2 50	
Red Dutch,.....	—	—		Grapes, per pound:			
Lettuce, per head,	4	6		Black Hamburg,.....	—	—	
Spinach, per half peck,...	6	—		Malaga,.....	—	—	
Dandelions, per half peck, ..	6	—		Cucumbers, each,.....	20	25	
Cabbage sprouts, per peck, ..	12	17		Cranberries, per bushel,...	3 50	4 00	
Turnip-tops per peck,.....	12½	—		Lemons, per dozen,	12½	20	
Rhubarb, per pound,.....	4	6		Oranges, per dozen:			
Asparagus, per bunch,.....	8	10		Sicily,.....	20	25	
Peas:				Havana, (sweet),.....	25	37½	
Per bushel,.....	8 00	—		Pineapples, each:			
Pr bushel, (fr. Norfolk, Va)	2 00	2 50		Common,.....	8	12½	
Per peck,.....	50	62½		Extra quality,.....	25	37½	
Pot and Sweet Herbs.				Cocoanuts, each,.....	5	6	
Parsley, per half peck,.....	25	—		Chestnuts, per bushel,.....	4 00	4 50	
Sage, per pound,.....	17	20		Walnuts, per bushel,.....	2 00	2 50	
Marjorum, per bunch,.....	6	12		Almonds, (sweet,) per pound,	—	—	
Savory, per bunch,.....	6	12		Filberts, per pound,.....	4	—	
Spear-mint, per bunch,.....	6	—		Castana,.....	4	—	
				English walnuts, per lb.....	5½	6	

REMARKS.—The season, thus far, promises finely: fruit of all kinds promises abundantly, particularly strawberries, raspberries, &c., and if the present favorable weather continues, will ripen some-

what earlier than last year. The market continues rather dull for the season, and, with the exception of several of those articles of which the old crop is about gone, and the new just in, prices have not materially changed.

Potatoes are firmer, and might perhaps be quoted a fraction higher, but so few sales are effected at any advance on our prices, that they are not worthy of note. Turnips are nearly gone, and, in consequence, there has been an advancement in prices. Onions are about gone, but few remaining, and those inferior. Beets and carrots higher, and but few left. Parsnips very scarce, the best selling at twenty-five cents per dozen. Horseradish about gone for the season. Radishes abundant, good, and cheap; the weather has been highly favorable to a good growth. The stock of cabbages is completely exhausted; scarcely a drumhead to be found in the market. Lettuce plentiful. Spinach, dandelions, &c. very abundant. Rhubarb plenty at our quotations. Asparagus has been well supplied, but the prices are very variable, according to the limited or abundant supply;—a few warm days, and prices fall to eight cents—a few chilly days, and it commands twelve and a half as freely. Peas have been in the market all the week, from the south, and sold readily at quotations; the first raised in the vicinity, were brought in to-day by Mr. Pierce, of West Cambridge, and sold at quotations; they will be abundant in a day or two. No squashes are to be had, except West Indias.

Apples are nearly gone; russets and a few Baldwins only to be had. Pears are all gone. Strawberries have been received from the south, in very good order, and sold at our prices. A few cherries came to hand to-day, and commanded our quotations. Cucumbers more plentiful, and of good size. Cranberries are higher, and only a few now remain on hand. Lemons very plenty. Oranges of prime quality command our prices. Pine-apples have been received this week, but mostly in poor order; a few very superior ones command the highest prices. Walnuts a shade higher. In other kinds but little doing worthy of note.—*M. T., Boston, May 28, 1840.*

HORTICULTURAL MEMORANDA

FOR JUNE.

FRUIT DEPARTMENT.

Grape vines, in the green-house, will now have completed their flowering and set their fruit. The first thing to attend to now, will be to thin out the fruit thoroughly, in order that the berries may be large and fine. Syringing should now be resorted to, and the young wood should be regularly tied in as it advances in growth. Vines in the open air will commence blooming in a few days. See that the young wood, for bearing another year, is carefully tied to the trellis.

Strawberries should be looked after: if the weather continues dry, new plantations should be watered; old beds will also be much bene-

fitted by a fresh supply of water: cut off the runners, if large fruit is wanted.

Raspberry plants should be all tied up, if not done before.

Gooseberry bushes.—The caterpillars will soon begin to make their ravages on the foliage of the plants: be careful to kill as many as possible.

Fruit trees, of all sorts, should be looked after, and all insects destroyed. Be careful, and pick up every plum that drops from the tree, and burn them; by following this method, the curculio may be soon destroyed.

FLOWER DEPARTMENT.

Dahlias may now be set out: commence immediately to plant, in order to have a few to flower early, and finish planting out by the 20th. Make the soil light and rich.

Annuals, sown in April, in pots in frames, should now be transplanted into the open ground. Asters and balsams require a good rich soil to flower well.

Camellias.—Commence removing the plants from the green-house, selecting all those which show buds, and leave the others till they have finished their growth.

Pansies, from seeds sown in pots in April, or in the open ground, should be transplanted.

Tulip and hyacinth bulbs should be taken up this month.

Roses, geraniums, and other plants, may be removed from the green-house.

Cuttings of heaths may yet be put in with success.

Verbenas may now be turned out into the border, or in clumps by themselves, and they will spread and cover two feet of ground.

Biennial and perennial seeds may be sown any time in June, and the plants will flower well next year.

Rocket larkspur seed, sown now, will produce a fine show of flowers in August.

Carnations should be increased by layers.

Roses should be increased by layers and budding. See our last volume, p. 253.

Stock gilliflowers.—Seed sown now, will flower finely in pots all the autumn and winter.

Geranium cuttings should be put in this month.

Green-house plants, of all kinds, may be propagated at this season.

Pinks should be increased by pipings.

VEGETABLE DEPARTMENT.

Celery plants should now be transplanted into beds, in rows, about one foot apart, and three inches apart in the rows.

Savoy and drumhead cabbages may be sown now.

Pepper plants, raised in the hot-bed, should be transplanted into the garden.

Cucumber plants, in frames, will need attention; water freely and shade occasionally in very hot sunshine.

THE MAGAZINE OF HORTICULTURE.

JULY, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Notices of Green-houses and Hot-houses, in and near Philadelphia.* No. 2. By a PHILADELPHIA AMATEUR.

George Pepper, Esq., Chestnut Street, Philadelphia.—Mr. Pepper's green-houses are situated immediately in the centre of Philadelphia, but a few minutes' walk from the Independence square, on Chestnut street, and immediately in the rear of his dwelling-house, and are divided into several compartments. Many of his plants, and indeed nearly all capable of removing, have been placed in the open air. The various species of oranges and lemons are completely covered with fruit, and present a really beautiful appearance; while their general good health and vigorous growth reflect the highest credit on his intelligent and gentlemanly gardener, Mr. Chalmers, jr. My thanks are due to him for his constant politeness, during my lengthened visits. The camellia house, facing the west, is unequalled for the beauty of its arrangement, and for the magnificent appearance of the plants. I noticed a number of plants of the beautiful *Gardenia radicans*, about opening their blossoms. Immediately in front of the house some fine plants of the *Bouvardia triphylla*, and *Punica* sp. were displaying their gorgeous blossoms. The larger green-house is now filled with the various varieties of *Cacti*, many of which are looking much exhausted from the profuse manner of flowering. I noticed a very fine plant of the *Cereus Mallasoni*, engrafted on the *Cereus triangularis*, and another of the *Ackermánii* or *spléndens*, (?) and of the *Epiphyllum truncatum*; the last is the finest, I believe, in Ameri-

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ca. A few geraniums, on the front stage, were yet in bloom, but so weak as almost to defy recognition: this, however, is no fault of Mr. Chalmers; the house is not adapted to their growth.

In the next division, formerly occupied as winter quarters for the *Cacti*, the *Gloxinia speciosa*, *Euphorbia elegans*, *Sapelia maculata* and *ambigua*, and *Cereus speciosissimus* were in fine flower. I noticed the new *Euphorbia Jacquinæflora* growing most vigorously, engrafted upon the *Poinsettia pulcherrima*, an idea I believe entirely novel, of which Mr. Chalmers is the originator. The graft was placed, and then merely secured by a piece of mat, and exposed to the light and air, without any protection, the success proving admirable.

In the hot-house the palms were displaying their magnificent fronds, and a variety of other things, were yet in bloom. Among the most beautiful, were the *Tillandsia bromeliæfolia*, *Cypripedium elegans*, *Gloxinia grandiflora*, and *candicans*, and the *Hoya carnosa*, and *Passiflora Kermesina*, which are trained over the rafters.

Mr. Pepper, the proprietor, is celebrated for his devoted zeal to the science of horticulture; and the proofs constantly before the eyes of his friends reflect the highest credit on his untiring exertions. May he long live to watch over them with a father's eye.

Respectfully,

A PHILADELPHIA AMATEUR.

Philadelphia, June, 1840.

ART. II. *On the multiplication of Tree Pæonies, (Pæonia Moultan,) by grafting. Translated from the Le Bon Jardinier Almanach, for 1839, in the Gardener's Magazine.*

IN our second volume we have given a complete history of the Chinese tree pæony, its introduction into Great Britain and this country, its cultivation, propagation, &c.; and to those of our readers who wish for information upon this beautiful shrub, we refer them to that volume, where they will find, in addition, all the varieties, then known, described. We have also, on various occasions, noticed the tree pæony, and, in particular, the method of propagation below described, which we saw in successful practice, at the late celebrated nursery of Col. Carr,

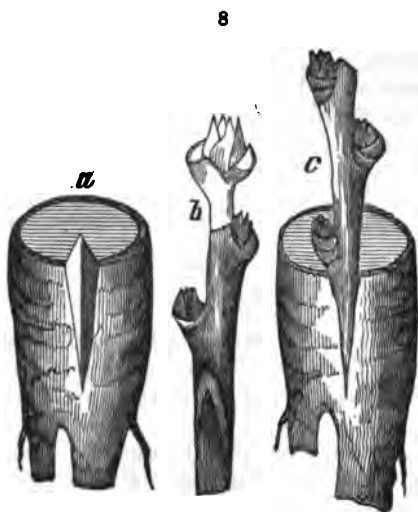
near Philadelphia, (See Vol. III. p. 210.) The invention of this method of propagation is attributed to M. Soulange Bodin, of Fromont, near Paris, but the plan was communicated in the *Gardener's Magazine*, some years ago, and from thence copied into our pages. It first appeared in the *Bon Jardinier* for 1839.

As this fine shrub is rare in collections, we have copied the following, accompanied with an engraving, representing the mode of the operation, with the hope that it may result in rendering the various varieties as common in our gardens as other shrubs, whose beauty is far less engaging, and whose cultivation is attended with more trouble. Perfectly hardy, of dwarf stature, and superbly splendid in its flowers, it merits a place in every garden claiming any pretensions for the choiceness of its plants.

“Plants of the *Pæonia Moutan*, raised by cuttings, remain weak for several years; but those grafted on the tubers of the herbaceous pæony grow with vigor, and, if permitted, will flower the following

spring. The operation of grafting is performed between July 13, and August 13, and will readily be understood by fig. 25, in which *a* represents a triangular section made in the tube or stock; *b*, the scion, the lower end of which is pared off, so as to fit the triangular cavity in the stock; and *c*, the scion fitted to the stock. It is not necessary that there

should be more than one bud on the scion, and, if a blossom bud should be chosen, it will flower vigorously the following spring. In two or three years the scion will throw out roots, and become independent of the stock. This mode of propagating was invented by M. Soulange Bodin, who, after grafting, places the plant in a pot, plunges it in heat, and covers it with a bell-glass. By September the scion has united itself to the stock; and in October the stock throws out roots, and



the plant may be removed to a green-house or frame. Mr. Masters, of Canterbury, has adopted this mode of propagating, with this difference, that, after grafting, the graft being tied with bast, and covered with grafting wax, the whole is inserted into a bed of tan, leaving only about half an inch of the point of the scion above the surface. The grafted plants are inserted in the angular interstices between the pots, with which the pit is usually occupied; two, three, or four are placed together, according to the size of the triangular space; and a larger or smaller bell-glass is placed over them, as may be requisite. The tubers throw out roots by the end of September, or the beginning of October, and are then taken up and potted, and placed in a cold frame, where they remain through the winter.

The grafting wax used for covering this graft is composed as follows:—Burgundy pitch, one pound; black pitch, four ounces; rosin, two ounces; yellow wax, two ounces; tallow, or suet, an ounce and a half. The whole melted together, and, after being stirred, and allowed to cool, it is used when rather less than milk-warm.

The tree pæony may also be grafted with perfect success, by using the shoots of the current year, in the month of April, as scions, and grafting them on the tubers of the herbaceous pæony of the last year.”

ART. III. *Large specimens of Fagus sylvatica var. purpurea, and Pinus Cedrus, in the grounds of T. Ash, Esq., near New York.* By ALEXANDER GORDON.

CONSIDERING that information connected with any of the finer specimens of introduced trees may be interesting to you, I beg leave to send you the dimensions of two species, which I have no doubt are decidedly the largest of their kind in the United States, viz: *Fagus sylvatica var. purpurea*, and *Pinus Cedrus*. They are growing in the grounds of Thomas Ash, Esq., Throg's Neck, West Chester Co., N. Y. The grounds had formerly been occupied as a nursery, I believe the most original of all the American nurseries. These specimens were, as far as I can learn, among the first of their sorts which were introduced into this country, and now serve, with other exot-

ics and splendid native species, to render the residence of Mr. Ash one of the most superbly wooded places which has come under my observation on this side the Atlantic.

Fagus sylvatica var. *purpurea*.

Height, 56 feet.

Circumference 3 feet from the ground, 6 feet.

Circumference of top, 12 feet from the ground, 108 feet.

It is a splendid specimen, with a most symmetrically formed semi-elliptical top, and I exceedingly regret that I am not a sufficient draughtsman to send you a correct drawing of this very superb tree.

Pinus Cædrus.

Height, 53 feet.

Circumference 3 feet from the ground, 6 feet.

Circumference of top, 12 feet from the ground, 90 feet.

As far as I can learn, they have been planted about sixty years; but, on this point, I am not able to obtain sufficiently correct data.

Sir, I am yours, very respectfully,

ALEXANDER GORDON.

June 21, 1840.

Our thanks are due to Mr. Gordon for the above information. We intend, hereafter, to devote some space to the subject of arboriculture, and, as being connected with the subject, it will gratify us to learn the age and size of many of the finest specimens of our native as well as foreign trees and shrubs. *Pinus Cædrus*, or Cedar of Lebanon, is rarely seen in this country of the size of that in Mr. Ash's grounds, and we are not aware of the existence of but few specimens of any size in the country.—*Ed.*

ART. IV. *List of Native Plants discovered growing near Boston, the present season—in a letter read before the Massachusetts Horticultural Society.* By Dr. T. W. HARRIS, Cambridge.

With this will be sent to the rooms of the Society fresh specimens of *Smyrniun* (*Zizia*), *aureum* of Linneus, *Dracæ-*

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na (*Clintònia*,) *boreàlis* of Aiton, and of *Convallària* (*Smilacina*,) *trifolia* of Desfontaines, with specimens of the common *Convallària* (*Styràndra*) *canadensis* of Pursh, to compare with the latter. The *trifolia* is readily distinguished by its six-parted perigone, six stamens, and its lanceolate leaves, and it grows only in bog meadows. The *canadensis*, on the contrary, has a four-parted perigone, four stamens, heart-shaped leaves, and grows in shady and moist situations, but not in bogs.

The following is a list of native plants, which (with one exception,) have been discovered near Harvard University, by the Cambridge botanists, during the present season, and they are interesting additions to the Flora of the immediate vicinity of Boston.

Lepidium campèstre L. Natural order Cruciferae. *Tetradynàmia siliculòsa* L. Not in Dr. Bigelow's *Florula Bostoniènsis*.

Dentària diphylla, Michaux. Natural order Cruciferae. *Tetradynàmia siliquòsa* L. Found in wet lands on the eastern side of Wellington Hill, in West Cambridge; the nearest locality to Boston, given by Dr. Bigelow, is Amherst.

Viola soròria Willdenow. Natural order Violaceae. *Pentàndria monogynia* L. Possibly a variety of *cucullàta*, but it grows only in rather dry soil. Not noticed by Dr. Bigelow.

Viola primulafolia L. Perhaps a variety of *lanceolata*, or a hybrid between it and *blanda*; not in the *Florula Bostoniènsis*.

Prùnus (*Cérusus*) *boreàlis* Michaux. Natural order Amygdaleae. *Icosàndria monogynia* L. Between Cambridge and Wellington Hill, on the Concord turnpike. The only locality near Boston, given by Dr. Bigelow, is Blue Hills, Milton.

Rùbus saxatilis Michaux. Natural order Rosaceae. *Icosàndria polygynia* L. Swamp near Wellington Hill. Dr. Bigelow says, "dry hills, Danvers."

Smyrniùm (*Zizia*) *aùreum* L. Natural order Umbelliferae. *Pentàndria digynia* L. Low grounds near Wellington Hill. The nearest locality given by Dr. Bigelow is Walpole, N. H.

Verónica peregrina L. Natural order Scrophulariaceae. *Diàndria monogynia* L. Not uncommon in fields in Cambridge, but not in Dr. Bigelow's *Florula*.

Sàlix pedicillàris Pursh. Natural order Amentaceae. *Diœcia diàndria* L. Low grounds near Prof. Norton's house, and also near Wellington Hill. Not in Dr. Bigelow's *Florula*.

Saks nigra Marshall. South side of Fresh Pond. Not in Dr. Bigelow's work.

A'lnus incana Willdenow var. *glauca* Michaux. Natural order Amentacæ. *Monœcia tetrándria* L. Not in Dr. Bigelow's work.

Pinus (Làrix) pëndula Aiton. Natural order Coniferæ. *Monœcea monadélphia* L. Swamps opposite Mr. Lee's house, near the Concord turnpike; not in Dr. Bigelow's *Florula*. In the same swamp is found *Pinus (Abies) nigra* Aiton, which, Dr. Bigelow says, "is not common, unless cultivated in the environs of Boston."

Orchis spectábilis L. Natural order Orchidacæ. *Gynándria monándria* L. Low grounds near Wellington Hill, where it was found in 1838, and again on the 26th of the present month. The nearest locality given by Dr. Bigelow is Vermont and New Hampshire.

Trillium pictum Pursh. Natural order Smilacæ. *Hexándria tryginia* L. Exeter, New Hampshire. Dr. Bigelow says, Ascutney Mountain, Windsor, Vermont.

Convallària (Smilactina) trifolia Desfontaines. Natural order Smilacæ. *Hexándria monogynia* L. In a bog, among *Sphágnum*, on the north-west side of Fresh Pond. Dr. Bigelow has recently inserted this locality in the third edition of his *Florula*, on the authority of Mr. Edward Tuckerman, Jr.

Dracæna (Clintònia) borealis Aiton. Natural order Smilacæ. *Hexándria monogynia* L. Woods near Wellington Hill. Dr. Bigelow says, "Woods in Gloucester, and Wachuset, Monadnock and White Mountains."

Many naturalized plants are omitted in this list, but ought to be found in our botanical manuals.

T. W. H.

Cambridge, May 30, 1840.

ART. V. *Method of cropping one quarter of an acre, as practised by L. Vaughan, Williamsburg, L. I.* By Mr. VAUGHAN.

BEING but a tyro in the cultivation of mother earth, I shall confine my reply to your call to *facts*, and leave *effects* to my seniors. You think the quantity produced from one fourth of an acre, large; yet, I now see, I could have made it larger.

1839.—Made hills for egg plants, in each of which I deposited half a bushel old horse-manure—labelled the hills to find them again.

Feb. 24.—Planted, this day, broad Windsor beans over the hills prepared for egg plants;—planted over the broad beans, spinach, radish, cress, and lettuce, all of which did very well, and were off the ground before the beans required hoeing. The beans grew to their usual size, but were not so prolific as they are in England.

From May 11th to 20th, turned out egg plants from pots into the prepared hills, amidst the broad beans. The beans were off the ground from the 15th to the 20th of June, and were a protection to the egg plants from the severe storms and cold weather of 28th May to 5th June. About the middle of August, sowed turnips, in drills, between the eggs, and some of them made very fair roots.

March 7th.—Prepared hills four feet apart for tomatoes and Lima beans, with half a bushel of old horse manure in each; labelled the hills to find them again; planted peas in drills *north and south, close by* the hills for tomatoes and beans.

April 22 to May 10.—Turned out tomatoes from pots into the *prepared hills by the peas*. I placed a pole in each hill for tomatoes and Lima beans, at the time of making the hill, and tied the tomato to the pole as you would a dahlia. Planted Lima beans under a sash, on the 27th of April, and transplanted them into the hills *by the peas* on the 14th of May. The peas were of great service to the beans and tomatoes during the cold weather and storms above alluded to; the peas were off the ground from the 10th to the 20th of June. In hoeing the Lima beans and tomatoes, *I trenched between them for celery!* which I transplanted from its *nursery* bed the first week in August. The Lima beans were off the ground from the 1st to the 10th of September. I think the beans were *decidedly* favorable to it for the first fifteen to twenty days. I have never found the Lima bean to grow, or even *ripen*, much after the 10th of September. The celery between the rows of tomatoes was very poor, as I found it impossible to confine the tomatoes to the poles, and they shaded it too much.

When gathering my vegetables, I selected those *nearest the second crop*, to give it the benefit of all the light and air I could. I kept constantly growing in pots, melons, corn, cabbages, &c., and *the moment* I cleared the ground of *even one* hill of corn and potatoes, or any thing else, a *pot* of *some other* vegetable was turned into its place.

No one must attempt the three crops without *good ground, made better* by rich old manure. I have this day tomatoes on

my vines as large as a pigeon's egg; melons, egg plants, &c., equally as forward. My early cedo nulli peas are all *off the ground to day*, and late melons from pots take their place. Some of my early dahlias blossomed last week, the flowers large, and colors as brilliant as those later in the season.

Yours, truly,

L. VAUGHAN.

Williamsburg, L. I., June, 1840.



ART. VI. *Observations upon the method of growing Apple and Pear Trees by grafting upon the roots.* By ALEXANDER GORDON.

AMONG the most valuable hints which have recently come under my notice, I consider none of more importance than those advanced by your correspondent, Mr. Teschemacher, and so ably responded to by yourself, on a free communication among gardeners. Gardeners, of all other classes of men, ought to be the last to aim at concealment, in any improvement which they may effect. Mystery is a word which ought to be banished from the gardener's vocabulary. Horticulture embraces a range so wide, and minutiae so intricate, that, without a free communication among its practitioners and amateurs, the most accurate observer and persevering gardener could, from his own experience, attain but a faint knowledge of a business whose branches are so multifarious, and where the routine of operations embrace so wide a field. Under this impression, I beg leave to communicate, through the medium of your valuable pages, a system of growing fruit trees, which, although not possessing novelty, is certainly not so extensively known as its merits deserve.

Grafting on the roots of apple and pear trees has long been partially practised; but I question if there are many nurserymen who have carried this to any great extent. I have had various opportunities of testing the practice, and I am perfectly satisfied of its efficacy. The stocks for performing the operation in a proper manner, ought to be only a year old. If they have been grown in a deep free soil, (which, for this method, is absolutely necessary,) they will have roots from six inches to a foot in length, of a fusiform shape, and of a suffi-

cient thickness to receive a scion. In the fall they are taken up and laid in by the heels, in a cellar or other convenient place, until required. A quantity of scions are selected at the same time, which must be carefully assorted and properly tallied: these may likewise be placed in a cellar in sand, or, failing a good cellar, dig a pit about six feet deep, in a dry situation, place the scions in an upright position, covering them nearly to the top with light soil or sand; place boards over the surface of the pit, leaving a vacuum of three or four feet between the scions and the boards, over which a sufficient quantity of soil is to be put; then cover the whole with rank litter, or such other substance as will prevent the frost from penetrating through the soil; this will also ensure an easy access to the scions when required.

In the month of February, if there is much grafting to be performed, operations may be commenced. The woody part of the stock is cut entirely away, and the root only used, which must be cut into lengths of three or four inches, one root yielding frequently three or four stocks. Grafting is performed in the usual manner, and when the operation is finished, they are placed in shallow boxes, over a layer of rich, light soil, burying the whole grafted part under ground; they are put in rows across the box, as thick as they can be placed beside each other; after the first row is properly placed, put about two inches of soil as a separation between it and the succeeding row, and so on until the box is filled. Several sorts may be placed in the same box, only let each sort be perfectly distinct, and regularly named. When the box is filled, it must be placed in a shaded part of the green-house,* not exposed too much to the sun's rays,—on the back shelves, or under the stages will answer very well for some time, say until the middle of April, when they must be gradually inured to the light and air, until finally planted in the usual manner in the open ground, in the month of May. A perfect union will have taken place, and shoots of those grafted in February will have elongated from three and four to six inches.

The benefits derived from this system must be perfectly obvious. The grafting is performed at a season when little else can be done; the trees are much handsomer than those grafted in the usual manner, and the time occupied in planting out is very trifling, being planted with a common dibble; a good hand will plant several thousand in a day. I have known a

* A common frame will answer where there is no green-house, only it will be necessary to shade with mats during the heat of the day, and also to cover them during cold nights.

nurseryman in this State graft above one hundred thousand apple trees in a season, and in two years they were handsome saleable trees.

Yours, very respectfully,
June 21, 1840.

ALEXANDER GORDON.

ART. VII. *Some Observations on the cultivation and treatment of the Calla aethiopica.* By the EDITOR.

FEW plants, excepting the geranium and the rose, are more generally cultivated, as parlor ornaments, than the calla. Its large, white, stately blossoms, successively produced during winter, and the vigor and ever healthy aspect of its broad and deep green fleshy leaves, combined with its simple cultivation, render it a most desirable object. Yet, notwithstanding that its cultivation is simple,—for it will flourish in a degree, with but slight attention, if freely supplied with water,—it is rarely seen in that vigor and elegance to which it can be easily brought by pursuing a judicious and natural mode of treatment.

The *Calla aethiopica* is a native, according to the *Hort. Británnicus*, of the Cape of Good Hope; but its geographical limits extend beyond the Cape. It is found growing in low and wet situations, where its roots are covered with water for a portion of the year. This is the period of its flowering; soon after this the roots, in the absence of rain, are exposed to drought, and the soil around them becomes dry, and the foliage, like other bulbs, assumes a decaying tinge, and in a short time is nearly dried up. This is its natural mode of growing, and it teaches a lesson which, if observed, will lead to its cultivation in the highest degree of perfection; for it should be the object of the cultivator to assist nature rather than pervert her wise designs.

The most general mode of treatment is, to keep the plants continually excited, and in growth: no sooner does a small plant fill the pot with roots, than it is shifted into a larger size; this is again removed to a larger one, and so on, until a pot cannot be procured of sufficient size to hold a single plant. During the progress of the plant, it has generally thrown up some ten or twenty or more offsets from the main root, and

probably only two or three of them of sufficient strength to bloom: water being liberally given, keeps them in a growing state, but they soon become so unwieldy from the great size of the pots, occupying too much room, requiring too much labor in removing them from place to place, and yield such a small proportion of flowers compared with smaller plants, that their cultivation is frequently given up. It will be our object to show how the calla can be grown in the greatest perfection we have ever seen it.

The plants which have flowered during the winter should be now placed out in the open air, if not done previously. The pot or pots containing the plants should be turned down upon their sides, in any situation partially shaded, so as to prevent all heavy rains from wetting the soil. In this way they may lay all summer, until the first of September, when preparations should be made for potting the roots, preparatory to their being taken into the house for the winter.

If the plants are old, and have thrown off numerous offsets, the best method will be to shake off all the earth from the roots: the large and strong bulbs should then be selected from the small ones, and planted in No. 4 pots, in a good rich soil, composed of about one half fresh rich loam, and one half peat earth, well mixed and incorporated together: the small offsets, if no more plants are wanted, may be thrown away, and only the large roots retained. The plants, after having been potted, should be regularly supplied with water, and as the leaves attain to some height, the quantity should be slightly increased. About the first of February the plants may be removed into No. 6 pots; gradually increase the quantity of water, as the plants commence throwing up their flower stems, and the pans underneath the pots may be kept filled, or the pot may be set into a tub of water its whole depth.

Treated in this manner, the flower stems attain to the height of five feet, with large flowers, upwards of a foot long, and proportionally broad, deep, and vigorous. The caulescent stems will also attain to a great size, and the whole plant will be one of the finest ornaments of the room, reaching nearly to the top of the window, or, if standing upon the floor, reaching to the height of five feet.

This mode of cultivation has many advantages over that generally pursued. In summer, when the garden supplies us so abundantly with the most brilliant and odoriferous flowers, pot plants are less esteemed than in winter; and although the calla may occasionally bloom, by being kept continually growing, its flowers will neither be so large or abundant, nor the

beauty and vigor of the plant so great, as if it was allowed rest, (so much needed by all bulbs,) during three or four months of the year.

It is most readily increased by potting the little small offsets which spring up around the base of the stem, and they should be potted and treated precisely like the old plants: they will generally bloom the second year, but will not arrive at full growth until the 3d or 4th.

ART. VIII. *Some Remarks upon the Verbena, with an Account of several new Seedling varieties.* By the EDITOR.

WE have, in the course of the past three or four years, in the several volumes of our Magazine, described nearly every species and variety of the *Verbena*, introduced or originated, in this country; and have likewise detailed, at some length, their cultivation and treatment, particularly of those kinds which require any peculiarity of management; and their growth has now become so general, that, with what we had previously written, there is little necessity, in recording a new one, to add any thing beyond a description of the variety. Being all produced from those whose treatment has been noticed, they partake mostly of the same habits, and, with few exceptions, a reference to our previous articles will afford all the information which may be needed, to cultivate, in the most successful manner, all the beautiful varieties of this now extensive and universally admired family.

So indispensable have verbenas become, as ornaments of the flower garden, setting aside their great value as parlor plants, that nothing can make up for a want of them. What flower can be named so easily cultivated, or growing and blooming so freely in a soil where few others would flourish;—in flower the whole summer long—scarcely checked in its vigor by the hoar frosts of autumn—universally admired for the great brilliancy of its corols?—What a blank would their absence create in the border heretofore enlivened by their dazzling beauty! It must be allowed, that, of all late additions to our gardens, the verbena, with its numerous and probably endless varieties, is the greatest treasure of all. We may be

over zealous in our admiration of this tribe; but if the finest varieties are seen in full perfection, we fear not but that our opinion will be seconded by every lover of plants.

The great diversity of tints which have already been obtained, give strong assurance that by the process of hybridization, which has been the means of effecting so much in horticulture and floriculture, almost every shade of color may be obtained, and eventually striped and parti-colored ones of various combinations. Already possessing all the principal tints from white to a dark, rich, velvety purple, there can be no doubt but that the same care and attention which has so far rewarded those who have made experiments in the production of new sorts, may still add to the already extended list some which will excel those now esteemed the finest. The plants flower from the seed in a short period, and the results of experiments may be realized in the space of three or four months, a character which has probably been the means of so many new ones having been already produced; as few cultivators have the patience to watch plants through a series of years, to ascertain their beauty, and at last be disappointed by the possession of some ordinary, perhaps worthless, variety.

The verbena and the camellia are two tribes of plants, which, within the last few years, have had more really desirable varieties added to them, by the assiduity of American cultivators, than by the skilful gardeners of Britain. Our list of verbenas comprises many more varieties than are found in English collections, and among them some of excelling beauty. Our climate is much better suited to them than that of England, as it is only under the rays of a brilliant sun that the plants make a vigorous and rapid growth, and display, in abundance, their clusters of flowers, covering the ground as with a carpet radiant with gems. Ripening seed with facility in the open air, even those who do not possess any structure for forwarding the plants, by merely keeping them through the winter, in any ordinary room, may produce, with little care, new varieties in the course of a single summer, some of which may prove valuable varieties.

In our Vol. IV., pp. 168 and 201, we enumerated the following species and varieties:—*Verbena chamædrifolia*, *Tweediana*, *incisa*, *Arrandiana*, *venosa*, *Aublétia*, *multifida*, *Drummondii*, *sulphurea*, *pulchella*, and *pulchella alba*—eleven kinds, all of foreign origin, except *Arrandiana*, which was raised by Mr. Buist.

Subsequently, in Vol. V., p. 89, Mr. Buist has described four new kinds, raised by himself, viz. *Verbena Eyreana*, *alba*

[*teucroides*,] *intermedia*, and *Tweediedna grandiflora*; and our correspondent, Dr. Watson, (same volume, p. 282,) five new kinds, raised by Messrs. Mackenzie & Buchanan, Philadelphia, as follows,—*Verbena fulgens*, *Binneyana*, *Watsonia*, *rosea*, and *Kilvingtonii*,—nine kinds, all of American production.

Besides these, Mr. S. Feast, of Baltimore, has raised some fine ones, (Vol. V., p. 290;] and also Mr. Hogg, of New York; but none of these have been fully described in our pages.

Later than this, Mrs. Hibbert, of Philadelphia, has raised three new ones, which have been already noticed in our current volume, (p. 8,) making, in all which have been described in our pages, twenty-three kinds. We have now to add eight more new seedlings, being a total of thirty-one species and varieties described at length in our pages.

Verbena speciosa.—A pretty variety, with delicate bright pink flowers; the umbels are of medium size; good shape, not flat, and in this respect superior to *Eyredna*. The whole umbel remains in beauty some time; the habit of the plant somewhat like *Tweediedna*. This variety, together with the next following, was raised, last season we believe, by Mr. Hogg, of New York.

Verbena Powellii.—Flowers lilac, approaching to a pale purple, between *V. Binneyana* and *Eyredna*, some of the florets occasionally having faint stripes of the tint of *Eyredna*. The umbels are good size, but not so conical as *Tweediedna*. The habit of the plant resembles *V. Tweediedna*, but is less free and rapid in its growth. Raised by Mr. Hogg.

Verbena Richardsonii.—Very similar, in the color of the flowers, to that brilliant one, *V. fulgens*; but with little less of the velvety surface of the petals; umbels less dense and conical, and the florets not remaining so long expanded; some of the outer ones falling before the centre ones are fully blown,—a fault in some of the older varieties, which detracts from their merit. In the habit of the plant, it resembles the *V. chamædrifolia*, being, like that, more procumbent in its growth than the *fulgens*: for cultivation in beds it will be a fine kind, but for pots less desirable than some others. It was raised by John Richardson, Esq., of Dorchester, an amateur gentleman who has raised many fine seedling plants, and who is continually instituting experiments for the further production of superior varieties of various tribes, particularly of the rose, phlox, and pæony.

Verbena Colcórdii.—Deep crimson purple, rather richer in its tints than the *Binneyana*; the umbels large, good shape, the flowers opening together, and remaining some time in beauty. In the habit of the plant, it resembles the *Tweediana*, and is a free flowerer. It was raised by Mrs. Hibbert, of Philadelphia, at the same time with those described at p. 127. It forms, with the *V. Binneyana* and *Pépperi*, a pretty addition to the dark colored varieties.

Verbena var. (Wales's seedling).—In color between *V. Tweediana* and *fulgens*, which might be termed a deep scarlet. The umbel is fine shaped, and the largest of any of the varieties; the individual florets are also of large size, and the whole contour of the clusters showy and handsome. The plant, in its habit, approaches to *V. Tweediana*, and, like that species, the foliage is vigorous, neat, and clean, and not subject to be attacked by insects; all these qualities combined, render this variety a valuable addition to the garden. It was raised by Mr. W. Wales, of Dorchester, an excellent cultivator of plants, who has, in addition to this, a large number of seedlings of considerable merit.

Verbena Russellii.—This is a quite distinct variety. The umbels are large and compact, and the individual flowers medium size. The color is a deep, rich, rosy crimson, approaching, when first expanding, to a crimson purple, but gradually growing paler as they become longer exposed to the light. This peculiarity is more striking in this variety than in any other we have ever seen, and a great contrast is thus formed in each umbel, the inner florets being of a rich lake, while the outer ones are of a light rosy crimson. In addition to this, the florets have a very large yellow eye, extending from the base over nearly one third of the flower, and so distinctly marked, that the variety might well be entitled to the name of bicolor. The habit of the plant is rather erect, something like *incisa*, but with neater and less vigorous foliage; the umbels are all elevated on long stems above the leaves. For pot cultivation, trained to a neat trellis, or in the border, tied up in the same manner, it is invaluable, but as a trailing variety less desirable than some of the others. We have named it in compliment to our correspondent, Prof. Russell, whose communications have been among the most interesting which have appeared in our pages, and to whom we are certain our readers feel greatly indebted for much useful information on botany and floriculture. We raised this variety last autumn, and it flowered early in March, since which time it has been continually in bloom.

Verbena Winchestèrii.—Among the delicate tinted ones, this variety may claim a prominent place. It is lighter in the color of the flowers than the *Eyredna*, and the umbels are quite conical and compact, resembling the old *Tweediedna supérba*. The plant, which first flowered in April, is not yet of sufficient size to show its peculiar habit, but, from appearances, it seems to resemble *Eyredna*, being strong and erect in its growth. It was raised from seed grown upon a plant of *Binneydna*, and it is singular that it should so far depart from the color of its parent. It should be trained up to a neat trellis.

We have named this variety in compliment to William P. Winchester, Esq. of Boston, a gentleman who possesses a pretty collection of plants, including many new and rare ones, which are successfully cultivated under his own care.

Verbena teucroides var. (pale blush.)—Similar to its parent, except in the color of the flowers, which is of a pale blush or flesh color. The habit of the plant, length of the spike of flowers, and vigor of growth, agree with the *teucroides*. This variety was raised from seed by Mr. Donald, of the Public Garden, where we saw it in flower a few weeks since, and where it probably may be seen in bloom all summer. It might be appropriately called *incarnàta*, from the pale and delicate tint of the blossoms.

Mr. Donald has also raised another variety, somewhat like *V. Arranidna*, but we did not notice it particularly, to describe it. From its similarity to some of the other purples, it will be less esteemed than others.

The whole of those which we have here described are desirable varieties, and three or four of them the most superb which have yet been produced. We doubt not, however, but others will soon be raised, fully equalling the above. Indeed, so great are the changes which are constantly taking place through the seed, that we cease to be astonished at any results, and a vast improvement may yet be made, both in the size of the umbels and the color of the flowers.

We shall try further experiments in the production of new varieties, and should we succeed in raising any very superior kinds, a description of the same, as well as of any other really fine one which may be produced by other cultivators, will be speedily given in our pages.

ART. IX. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1s. each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Floricultural and Botanical Intelligence. *Torrey & Gray's Flora of North America.*—Parts III. and IV. of this excellent work have just been published: we have not yet received our copy, but we learn from a friend, that these volumes are more interesting than the two first, and appear to have been got up with great labor and care. Much useful information is added by Dr. Gray, and a reference made to the original species, which Dr. Gray examined himself, while in Europe, in herbariums collected by those who first discovered and described the various American plants. We wish this important work was more fully appreciated and extensively read.

New work, containing the papers and writings of the late Mr. Knight.—It is announced in the London papers, received by the latest arrivals, that a new work of much importance to the horticulturist and vegetable physiologist is now in preparation. It will comprise the papers and correspondence of the late President of the Horticultural Society, Thomas Andrew Knight, Esq., and also letters of some of the first botanists and naturalists in Europe. The materials, we believe, are in the hands of George Bentham, Esq., Secretary to the Horticultural Society, and Dr. Lindley, gentlemen, who, we doubt not, will do full justice to the life and services of so distinguished a writer.

Echinocactus Eyrièsii.—This fine species has lately flowered in our collection in great elegance. Eight blossoms have expanded in the course of the past six weeks, and at one time four of them were fully opened: these four flowers were equally distributed over the plant, and in such a regular manner as to form, when in bloom, the corners of a square; all just of a size, the same length, and the flowers slightly turned outward. The buds began to open about six o'clock in the afternoon, and by nine were in the greatest perfection. The flowers remained open until ten o'clock the next morning, when they began to close, and very soon after had wholly shut up. We have never seen any of the cactus tribe which pleased us so much as the fine display of the four flowers on this plant. There are one or two more buds yet to expand.

Deutzia scabra, a rare shrub, with long paniced spikes of white blossoms, has flowered finely at the nursery of Messrs. Winships, Brighton, and beautiful specimens have been exhibited by them at the Massachusetts Horticultural Society's room. It is a fine addition to our hardy shrubs, and should be found in every garden. We are not aware that it is, as yet, scarcely known, except by occasional notices in our pages, in this country.

Magnolia macrophylla.—This most noble species has flowered in the greatest splendor and vigor, at the residence of the Hon. P. C. Brooks, Medford. A flower which was kindly furnished us by Mr. Brooks, Jr. measured eight inches from the base of the flower to the tip of the petals; and thirty inches in the greatest circumference of the flower. This species is hardy, or at least is so much so, as to require only the slight protection of having its branches tied together, intermixed with a few pine boughs.

We are astonished that an indigenous shrub, so truly grand, should be so extremely scarce in our gardens; yet we need not wonder, for even our common, though fragrant and pretty one, *M. glauca*, which can be obtained in abundance from its native locality, is rarely found in a cultivated state. We wish we could impress upon the whole gardening community the importance of introducing into our gardens all the fine indigenous plants with which our Flora abounds. The rhododendrons, the kalmias, and the magnolias, among the evergreen tribes; and the azaleas, the clethras, the andromedas, and other equally desirable and handsome plants, now rarely seen, except in their native habitats. The Massachusetts Horticultural Society, aided by the liberality of T. Lee, Esq., holds

out inducements sufficient to interest cultivators; but we fear that there are none who will be so interested as to become the recipients of the handsome premiums offered by the Society.

Fine specimen of Rodánthe Manglésii.—A specimen of this fine annual was raised last summer, by Capt. Mangles, who first introduced it from New Holland, which measured eighteen inches high by fourteen broad, with above one thousand flowers expanded, and twice as many in bud. The plant was brought to this extraordinary size by Mr. Goode, foreman to Mr. Henderson, Pine-apple Nursery, Edgeware Road. The seeds were sown April 5th, in peat, with a little loam, in pots. In May, the plants were transplanted, while in the seed leaf, and they were subsequently shifted six different times till about the middle of August; they were in No. 16 pots, [our No. 4 (six to seven inches in diameter,)—*Ed.*] and in the degree of perfection mentioned. The *Rodánthe Manglésii* has a great tendency to grow upward, without extending in breadth, but this is counteracted by frequent shifting, so as never to allow the roots completely to fill the pots.—(*Gard. Mag.*) We found, in our cultivation of this pretty annual, this same tendency to run up; we shall this year try a few plants in the manner here recommended.—*Ed.*

Hybrid Primroses.—A correspondent of the *Gardener's Magazine* states, that he has succeeded in producing some handsome hybrids between the polyanthus and the Chinese primrose. One of the varieties has a fine lilac flower, and was raised between a dark polyanthus and a fringed Chinese primrose. The other two, with shades of pale lilac, were the result of the pink Chinese primrose with the white [polyanthus.] The former plant produced seven flower stems, with forty-three flowers in bloom, and sixty-four buds, making a total of one hundred and seven buds. Plant, seven inches high, fifteen inches across, in a 32 size, (our No. 3.) Leaves, drooping, and very much cut. The changeable flowered variety, which changes from a pure white to a rosy pink, had nine flower stems, with fifty-eight flowers in bloom, and seventy-one buds, making a total of one hundred and twenty-nine buds. Flowers, two inches in diameter. Plant, two feet across, and eight and a half inches high.—(*Gard. Mag.*) Hybridization is working wonders in the production of new and beautiful plants; we should be glad to see attempts made, by some of our more enthusiastic gardeners, to produce hybrids between the same plants that are mentioned above.—*Ed.*

REVIEWS.

ART. I. *A concise application of the principles of Structural Botany to Horticulture, chiefly extracted from the works of Lindley, Knight, Herbert and others, with additions and adaptions to this climate.* By J. E. TESCHEMACHER. 1 Vol. 16mo., pp. 90. C. C. Little and James Brown. Boston, 1840.

HORTICULTURE in this country, so far, has been in a great degree a practical science; few of those who have taken an interest in the pursuit have gone beyond mere experimental knowledge. Astonishing effects in cultivation have been produced, but the cause from whence they arose has been a subject of but slight investigation. This might naturally be expected, while we are yet in the very infancy of an art, which, to be thoroughly and successfully practised, requires some research into various kindred branches of science, connected, in some degree, with a proper and judicious cultivation of soil. The want of a simple elementary work has tended to deter those who might be desirous of investigation, as the information sought after could only be found by examining many volumes of European publications, and searching through a vast quantity of matter foreign to the subject. The works of Dr. Lindley and the papers of Mr. Knight have, within a few past years, diffused much information upon physiological botany, and the *Outlines of Horticulture*, by the former author, republished in New York, has already prepared the way for a similar one better adapted to our climate. Mr. Teschemacher, by drawing somewhat upon this author, has succeeded in presenting the community with a very interesting work, the object and character of which we cannot better convey to our readers, than by quoting the prefatory remarks.

The combination of practical skill and experience with scientific investigation and knowledge, the former giving results, the latter affording reasons for these results, and sketching the outlines of farther experiments, has always appeared the surest ground of obtaining information of the greatest value on all subjects of natural science.

A concise and simple explanation of some of the prominent facts and laws of vegetable physiology, so that they might become known to, and guide those agriculturists and horticulturists, whose time is too much occupied to permit them to go into the detail of the reasoning involved in the numerous experiments scattered through many volumes and periodicals, must be of advantage.

The valuable experiments of Knight, the works of Lindley, De-candolle, Herbert, and others, the compilations of Loudon, and some of the results of the extraordinary attention paid, within the last fifteen years throughout Europe, to the laws and operations of vegetable life, added to my own experience and study of this subject, compose the basis on which this little publication is founded.

The subject of manure, and the properties of soils, do not strictly belong to structural botany, but the few details inserted regarding them, cannot be thought misplaced.

The diseases of plants must be left to the entomologist, as far as the insects which infest them are concerned, and to the cryptogamist as respects the injuries inflicted by fungi, lichens and mosses. Nor are there any channels into which the labors of those who are devoted to such branches, can be diverted with more interest to themselves or value to mankind.

It cannot be denied that many of the advantageous practices in horticulture and agriculture have been discovered by the mere practical man, without any deductions from science or the laws of vegetation. Yet it is probable, that, had the knowledge of these laws been earlier and more widely disseminated, these advantages would have been sooner known, and more generally diffused than they are at present. Many are disinclined to adopt a new course, and reject the old one to which they have been long attached, without some very palpable and sufficient reasons for the change. But one improvement introduced and properly accounted for, paves the way for others, and the mind is prepared to inquire. In this country, particularly, such a frame of mind is prevalent, and has produced very important results in agriculture; it will do the same in horticulture, now comparatively in its infancy.

It seemed, therefore, that the separation of a few of the principal facts concerning the structure and parts of vegetables, from the other masses of botanical knowledge with which they are usually published, and their application to the practice of horticulture, could not fail to be favorably received in this community.

A complete treatise on these subjects cannot be expected in a work of this nature, but if the facts and reasoning give rise to new experiments, and produce results favorable to the progress of horticulture or agriculture, the object of the publication will be completely answered.

This little work is divided into the following subjects:—
General nature of Plants—Root—Stem—Leaf-buds—Leaves—Flowers—Stamens and Pistils—Fruit—Seed—Sap—Air and Light—Perspiration—Cuttings—Scions—Transplantation—Manures.

The following chapters, on cuttings and scions, will show the manner in which Mr. Teschemacher treats the subject:—

Cuttings.—When a separate portion of a plant is caused to produce new roots and branches, and to increase an individual, it is a cutting.

Cuttings are of two sorts,—cuttings properly so called, and *eyes*.
A cutting consists of an internodium, (space between bud and bud,) or a part of one, with its nodus and leaf-bud.

When the internodium is plunged in the earth, it attracts fluid from the soil, and nourishes the bud until it can feed itself.

The bud, feeding at first upon the matter in the internodium, grad-

usually elongates upwards into a branch, and sends organized matter downwards, which becomes roots.

As soon as it has established a communication with the soil, it becomes a new individual, exactly like that from which it was taken.

As it is the action of the leaf-buds that causes growth in a cutting, it follows that no cutting without a leaf-bud will grow;

Unless the cutting has great vitality and power of forming adventitious leaf-buds, which sometimes happens.

An eye is a leaf-bud without an internodium.

It only differs from a cutting in having no reservoir of food on which to exist, and in emitting its roots immediately from the base of the leaf-bud into the soil.

As cuttings will very often, if not always, develop leaves before any powerful connection is formed between them and the soil, they are peculiarly liable to suffer from perspiration.

Hence the importance of maintaining their atmosphere in an uniform state of humidity, as is effected by putting bell or other glasses over them.

In this case, however, it is necessary that, if air-tight covers are employed, such as bell-glasses, they should be from time to time removed and replaced, for the sake of getting rid of excessive humidity.

Layers differ from cuttings in nothing, except that they strike root into the soil while yet adhering to the parent plant.

Whatever is true of cuttings is true of layers, except that the latter are not liable to suffer by evaporation, because of their communication with the parent plant.

As cuttings strike roots into the earth by the action of leaves or leaf-buds, it might be supposed that they will strike most readily when the leaves or leaf-buds are in their greatest vigor.

Nevertheless, this power is controlled so much by the peculiar vital powers of different species, and by secondary considerations, that it is impossible to say that this is an absolute rule.

Thus dahlias, and other herbaceous plants, will strike root freely when cuttings are very young; and heaths, azaleas, and other hard wooded plants, only when the wood has just begun to harden.

The former is, probably, owing to some specific vital excitability, the force of which we cannot appreciate; the latter either to a kind of torpor, which seems to seize such plants when their tissue is once emptied of fluid, or to a natural slowness to send downwards woody matter, whether for wood or not, which is the real cause of their wood being harder.

If ripened cuttings are upon the whole the most fitted for multiplication, it is because their tissue is less absorbent than when younger, and they are less likely to suffer from either repletion or evaporation.

For to gorge tissue with food, before leaves are in action to decompose and assimilate it, is as prejudicial as to empty tissue by the action of leaves, before spongioles are prepared to replenish it.

For this reason pure silix, in which no stimulating substances are contained, (silver sand,) is the best adapted for promoting the rooting of cuttings that strike with difficulty.

And, for the same reason, cuttings, with what gardeners call a *heel* to them, or a piece of the older wood, strike root more readily than such as are not so protected. The greater age of the tissue of the heel renders it less absorbent than tissue that is altogether newly formed.

It is to avoid the bad effect of evaporation, that a proportion of the leaves are usually removed from a cutting, when it is first prepared.

The method of striking cuttings in double pots, the outer filled with earth, in which the cuttings are placed with the ends inserted in the earth, touching the sides of the inner one, which is kept filled with water, has, for the above reason, been attended with success.

The directions for propagating by cuttings, in European publications, generally state the month for placing them in the earth; these directions would be apt to mislead in this country, where the difference of temperature ripens wood at a different period.

Cuttings will strike at any period of the year when the young wood is sufficiently ripe, and the plant is continuing its growth, but not when it is in a state of rest.

Scions.—A scion is a cutting which is caused to grow upon another plant, and not in earth.

Scions are of two sorts,—scions, properly so called, and *buds*.

Whatever is true of cuttings is true also of scions, all circumstances being equal.

When a scion is fitted on to another plant, it attracts fluid from it for the nourishment of its leaf-buds, until they can feed themselves.

Its buds thus fed, gradually grow upwards into branches, and send woody matter downwards, which is analogous to roots.

At the same time the cellular substance of the scion and its *stock* adheres so as to form a complete organic union.

The woody matter descending from the buds passes through the cellular substance into the stock, where it occupies the same situation as would have been occupied by woody matter supplied by buds belonging to the stock itself.

Once united, the scion covers the wood of the stock with new wood, and causes the production of new roots.

But the character of the woody matter sent down by the scion over the wood of the stock, being determined by the cellular tissue, which has exclusively a horizontal development, it follows that the wood of the stock will always remain apparently the same, although it is furnished by the scion.

While the preparations of the juices being effected by the leaves of the scion, the produce thereof will be the same as the species from which the scion was taken.

Some scions will grow upon a stock without being able to transmit any woody matter into it; as some cacti, which have only a small central development of woody tissue.

When this happens, the adhesion of the two takes place by the cellular substance only, and the union is so imperfect that a slight degree of violence suffices to sever them.

And in such cases the buds are fed by their woody matter, which absorbs the ascending sap from the stock at the point where the adhesion has occurred; and the latter, never augmenting in diameter, is finally overgrown by the scion.

When, in such instances, the communication between the stock and the scion is so much interrupted, that the sap can no longer ascend with sufficient rapidity into the branches, the latter die; as in many peaches.

This incomplete union between the scion and its stock, is owing to some constitutional or organic difference in the two.

Therefore care should be taken that when plants are grafted on one another, their constitution should be as nearly as possible identical.

As adhesion of only an imperfect nature takes place when the scion and stock are, to a certain degree, dissimilar in constitution, so will no adhesion whatever occur when their constitutional differences are very decided.

Hence it is only species very nearly allied in nature that can be grafted on each other.

As only similar tissues will unite, it is necessary, in applying a scion to the stock, that similar parts should be carefully adapted to each other; as bark to bark, cambium to cambium, and alburnum to alburnum.

The second is more especially requisite, because it is through the cambium that the woody matter, sent downwards by the buds, must pass; and also because cambium itself, being organizing matter in an incipient state, will more readily form an adhesion than any other part.

The same principles apply to *buds*, which are to scions precisely what eyes are to cuttings.

Inarching is the same with reference to grafting that layering is with reference to striking by cuttings.

It serves to maintain the vitality of a scion until it can form an adhesion with its stock; and must be considered as the most certain mode of grafting.

It is probable that every species of flowering plant, without exception, may be multiplied by grafting.

Nevertheless, there are many species, and even tribes, that never have been grafted.

It has been found, that in the vine and the walnut this difficulty can be overcome by attention to their peculiar constitutions; and it is probable that the same attention will remove supposed difficulties in the case of other species.

It is certain that scions thrive better on some stocks, even of the same species, than others, and that this depends somewhat on the soil in which the stock grows; this is a subject, however, on which there has been so much discussion, and on which practical experience has yet so much to develop, that no certain general rules can be laid down, particularly in this country.

From what has been said on perspiration, it seems that the practice of budding on the northern side of stems must be correct.

Mr. Knight often applied two ligatures to his buddings on peach trees, one above the bud, across the transverse incision, the other below: this last was taken off as soon as the bud adhered, the upper one was left on; thus obstructing the flow of the sap upwards and throwing it into the bud, which then vegetated early, and produced blossoms the following spring. As soon as the new shoot had attained about four inches in length, the upper bandage was removed, and the sap suffered to flow freely. By following this practice with roses, and by judicious heading down, I have obtained very large and healthy bushes on the top of a single straight stem the third year.

We commend this volume to amateurs and gardeners, assured that they will find in it a great deal of valuable and much needed information.

ART. II. *The Young Gardener's Assistant; containing a Catalogue of Garden and Flower Seeds, with practical directions, under each head, for the cultivation of Culinary Vegetables and Flowers; also directions for cultivating Fruit Trees, the Grape Vine, &c.; to which is added a Calendar, showing the work to be done every month in the year. Eighth edition, improved. By T. BRIDGEMAN. 1 Vol. 8vo. 408 pages. New York.*

WE noticed one of the former editions of this work in our Vol. III., p. 262. Mr. Bridgeman has added much new and original matter to this, the eighth edition, as well as arranged the whole in a concise and simple manner. We can again record our approbation of this volume, and commend it to those who are seeking for interesting information upon the cultivation of flowers, fruits and vegetables.

ART. III. *Report of the Agricultural Meeting, held in Boston, Jan. 13, 1840; containing the remarks, on that occasion, of the Hon. D. Webster, of the U. S. Senate, and of Prof. Silliman, of Yale College, Conn.; with Notes by H. Colman, Commissioner of the Agricultural Survey. Pamphlet 8vo. pp. 36. Salem, 1840.*

DURING the two past winters, the commissioner of the agricultural survey of the State, has held regular meetings every week, or fortnight, during the season at which the General Court were assembled together. At these meetings discussions have taken place upon the most important topics connected with farming, and the range of subjects has been very extensive, especially the past winter. The cultivation of corn and wheat, and particularly the production of silk and beet sugar, have been discussed at length, and much information connected with the subject, obtained by the commissioner, who has embodied the same in his last report. These meetings were very well attended, and some of them were of the most interesting character.

Mr. Webster having returned from Europe in the autumn, he was requested by the commissioner to address the meeting, at its first opening for the year; he did so, in the neat and excellent speech which is the subject of the present notice. Prof. Silliman also addressed the meeting, and his remarks were added to those of Mr. Webster. The notes by Mr. Colman are explanatory of some of the remarks made by Mr. Webster. It will not be expected that we should copy any of these speeches; but we are so much pleased with Mr. Webster's opening remarks upon the climate and soil of Britain, as compared with ours, that we cannot omit to quote it, believing that the same will be as interesting to the horticulturist as the agriculturist.

"The climate of England differs essentially from that of this country. England is on the western side of the eastern, and we on the eastern side of the western continent. The climate of each country is materially affected by its respective situation in relation to the ocean. The winds, which prevail most, both in this country and in England, are from the west; it is known that the wind blows, in our latitudes, from some point west to some point east, on an average of years nearly or quite three days out of four. These facts are familiar. The consequences resulting from them are, that our winters are colder, and our summers much hotter than in England. Our latitude is about that of Oporto, yet the temperature is very different. On these accounts, therefore, the maturing of the crops in England and the power of using these crops, creates a material difference between its agriculture and ours. It may be supposed that our climate must resemble that of China in the same latitudes; and this fact may have an essential bearing upon that branch of agriculture which it is proposed to introduce among us, the production of silk.

"The second point of difference between the two countries lies in the soil. The soil of England is mainly argillaceous; a soft and unctuous loam upon a substratum of clay. This may be considered as the predominant characteristic in the parts which he visited. The soil in some of the southern counties of England is thinner; some of it is what we should call stony; much of it is a free gravelly soil, with some small part, which with us would be called sandy. Through a great extent of country this soil rests on a deep bed of chalk. Ours is a granite soil. There is granite in Great Britain; but this species of soil prevails in Scotland, a part of the country which more resembles our own. We may have lands as good as any in England. Our alluvial soils on Connecticut river and in some other parts of the country, are equal to any lands; but these have not, ordinarily, a wide extent of clay subsoil. The soil of Massachusetts is harder, more granitic, less abounding in clay, and altogether more stony, than the soil of England. The surface of Massachusetts is more uneven, more broken with mountain ridges, more diversified with hill and dale, and more abundant in streams of water, than that of England."

Prof. Silliman's remarks were directed to the improvement which is still to be made in our soils, by the application of proper manures. Chemical knowledge among farmers is much needed, to enable them to judge of the nature and qualities of

their soils, and to enrich them by the addition of such manures as will afford the greatest food for particular crops.

We recommend this pamphlet to the attention of farmers: they will find it worthy of the talents of the distinguished gentlemen who addressed the meeting.

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

Radiation from Trees.—As a proof of the cold produced in solid substances, by radiation in a clear atmosphere, Dr. Guérin has ascertained, as had been previously done by Wells, that the temperature of trees and shrubs is much inferior to that of the air. On January 24, 1827, at seven, A. M., the air being $11^{\circ} 5'$ per cent., the snow adhering to the branches of a cypress, and other plants and shrubs, was $14^{\circ} 5'$, and 15° , that is to say, $3^{\circ} 5'$ lower than the air. (*Jamieson's Edin. Jour.*, Oct. 1830, p. 376, in *Gard. Mag.*)

Madia sativa.—This new oil plant, first brought into notice in this Magazine, by M. Hertz, of Stuttgard, has been grown on a considerable scale last summer, by Mr. Taylor, at Holbrooke, near Ipswich. One acre of very poor, stiff, clay loam, which, otherwise, would have been left a naked fallow, was sown on March 5th with five pounds of seed, and about the middle of August the crop was mown and dried like hay, and carried to the barn and threshed. The produce was thirty-three bushels of fine seed: eight bushels of this seed weigh three hundred and twenty pounds; and three hundred and twenty pounds yielded five hundred pounds of oil, and one hundred and eight pounds of oil cake. The total product of the acre was two hundred and fifty pounds of oil, and four hundred and ten pounds of oil cake. The oil is worth five shillings a gallon of seven pounds; so that, independently of the oil cake as food for cattle, and of the straw as manure, the oil produced nearly £9 (forty dollars) the acre.—(*Gard. Mag.*) We have already noticed the introduction of this species to Britain, (Vol. V. p. 227.) Might it not be successfully cultivated in this country? and might not an enormous crop be gathered on the rich prairies of the West? We trust that some enterprising farmer will be induced to give it a trial.—*Ed.*

To destroy worms.—A correspondent has sent us McDougal's recipe, which is:—Roll the lawn twice, then water it with lime water at the rate of one part of lime to ten gallons of water. The operation twice performed, will destroy every worm, without injuring the grass. Or, mix a quarter of an ounce of common sublimate with three gallons of water, and the same effect will be produced.—*Id.*

Preserving carrots for winter use.—In Vol. XV. of the *Gardener's Magazine*, Mr. Forsyth recommends that carrots should be stowed away for winter use, with about an inch of top to each. I beg to say, that I have practised the reverse of this mode, for a number of years,

with complete success. Instead of leaving one inch of top to each root, I have the whole crown cut off, or, as the men term it, cut in to the quick. This prevents the carrots from vegetating in the spring, and thus preserves the saccharine matter, as well as the fine flavor of the carrot till June, or longer; properties that render carrots, when preserved in this manner, far superior to carrots that are either sown in hot-beds during the spring, or those that have stood out during the winter; neither of which kinds do I grow, except in case of a short supply of the others.

I have recommended the same plan to be adopted in stowing Swedish turnips (*Ruta Baga*,) that are intended for spring consumption; and this plan is very much approved of in this neighborhood, as, when they are brought out of the store in March or April, they will be found to possess all the feeding qualities that they did when stowed away. The only, but very important thing to be guarded against is, not to allow them to be put too thick together, as, in that case, they would heat and spoil. The north side of barns or buildings is the best situation for storing the roots. (*Gard. Mag.*)

Allan Cunningham, the colonial botanist, at Sidney, died there on the 27th of June, 1839. His death was in consequence of a series of colds, caught during the rainy season, in his last unfortunate travels in New Zealand. A biographical notice of his death will be prepared, which will be published in the *Gardener's Magazine*. (*Id.*)

Pursh, the American botanist.—In the suburbs of Montreal lie the remains of poor Pursh,—Pursh, who had done so much for the elucidation of the botany of America, lies here; with no monument, not even a tablet, to point out the last resting-place of this most enthusiastic, most indefatigable man. Far be it from me to depreciate the valuable services of my countryman, Mr. David Douglas, but, were the two eminent botanists compared together, who would lose by the comparison, Pursh or Douglas? Yet the former is passed over in silence, while the latter is to be rendered immortal. I sincerely hope this brief allusion to the subject will not be considered obtrusive; and if it would only induce some more influential person to take up the matter, and verify the old adage, "better late than never," it certainly would, in my opinion, be only awarding a just tribute to departed worth. I have the most positive proof, that if a subscription were commenced by European botanists, it would be warmly responded to by various individuals in Montreal.—(*Gard. Mag.*) The above paragraph we extract from a long communication, in the February number of *Loudon's Magazine*, by our correspondent, Mr. Gordon, (whose article on the method of grafting apple trees upon the roots, appears in a previous page of this number,) who made a tour through the Canadas last autumn, commencing at the Falls of Niagara, and from thence to Toronto; from Toronto to Hamilton, and from the latter place to the shores of Lakes Erie and Huron to Toronto again by another route, and from thence to Montreal; traversing upwards of twelve hundred miles. Mr. Gordon gives a faithful account of the progress of gardening in the Canadas, and particularly describes many of the fine gardens in and around Toronto and Montreal.

We sincerely hope that Mr. Gordon's allusion to the remains of Pursh may receive the attention of botanists. It is certainly not too late to accord to Pursh the merit which his eminent services demanded while alive, by erecting over his remains some monument, to mark the burial place of so distinguished a botanist. We doubt not that every American botanist and admirer of plants will contribute liberally to so worthy an object.—*Ed.*

ART. II. Foreign Notices.

ENGLAND.

Cultivation of Vines in Pots.—At the autumn pruning of vines in houses, shoots of well-ripened wood, perfectly firm, with prominent buds, are to be selected, and placed in large pots of sand, protected from the frost until the month of February, when the eyes are to be cut out, with a small portion of the wood, in the same way as the rose, before taking the wood from the bark, and inserted separately into 60-sized pots, for the purpose of making plants to fruit the following year. The reason of placing each singly in 60-sized pots is, to prevent any check from shifting them from one pot to another. As good fruit depends much upon the perfecting of the wood, it is of the utmost importance that the growth be not retarded, which must be the case if more than one eye is placed in each pot; being divided when shifted, the roots are likely to be broken, and their growth much retarded until new spongelets are produced. When the eyes are potted off and well watered, they are to be placed in a frame on dung heat with a temperature varying from 65° to 70° Fahr.; kept close until they begin to push through the soil, when air is to be admitted by degrees, watering the roots and overhead when necessary, until the pots are filled with roots; then potted into larger sized pots to keep them growing, and on no account to stop the leading shoot; being so luxuriant they will burst some of the main eyes which are to produce fruit the following season. All laterals and tendrils to be removed as soon as they appear. The plants the next time of shifting, which is to be done before the roots are allowed to get matted, should be removed to a vinery or stove with a temperature of 70° or 75°; trained up the trellis under the lights, or on the back wall, there to remain until the wood is perfectly matured; air being gradually admitted, to prepare them for the next situation. It is the practice with many gardeners to place their vines in the open air, or to take the lights off their houses to mature the wood; but he would always prefer to admit air during the day, apply a little fire heat, and close up with a dry atmosphere at night. The plants should be placed in a favourable situation in the open air, where they would not receive too much wet; it is best to elevate the pots on boards or bricks, and fill up the interstices between and over the tops of the pots to the height of six inches, that the roots may receive no injury from frost, and where they are to remain until wanted for forcing. The compost for striking the eyes to consist of two thirds rich gritty pasturage loam to one third well pulverized old tan. The compost for growing and fruiting the plants to consist of two thirds loam, and one third well decomposed butcher's garbage, with a small portion of old tan. The pots in which they are to produce fruit to be the twelfth or eighth size; the last shifting to be performed in September. The plants will require no shifting when placed in the house to force; if shifted when forcing is commenced, they will produce a superabundance of wood, which would be injurious to the quality of the fruit. About the end of December, or beginning of January, he prunes his vines, leaving only three or four eyes to produce fruit: a portion, or the whole of them, where a succession is not required, may be placed in a pit on a gentle bottom heat of either leaves or tan, not exceeding 65°; the atmosphere

of the pit not ranging above 60°, syringing when necessary, and watering with deer-dung manure water. When the buds begin to burst, fire heat to be applied by flues, or, by what he considers preferable, hot water pipes. The vines to be stopped one joint above the fruit, removing all laterals, and allowing three bunches to remain for each pot; the atmosphere should not be allowed to rise higher than 65°, until the grapes begin to expand their bloom, when it may be gradually raised to 70°. When the fruit is set, the berries to be thinned; when stoning, the temperature of the house to be reduced a little, as much excitement at that particular time will cause them to become stunted; water to be given sparingly at that period of their growth, but to be applied copiously when the berries begin to swell. When they begin to change color, the temperature to be raised to 75°, as heat and light are now the principal agents by which they are brought to the greatest perfection; heat is the agent by which the aqueous matter contained in the berry is changed to the saccharine, and color is communicated to the fruit by the influence of light. It is of the greatest importance to know the sun's declination, with the latitude in which a gardener is placed, to ascertain the proper angle, at the season the fruit is to ripen, to command the most vertical sun. The sorts recommended for forcing in pots are, Black Hamburg, White Muscadine, Black Prince, White Muscat, and Black Esperione. In conclusion, he objected to the coiling system of growing vines in pots.

Mr. Caie observed: As light is one of the chief agents of vegetable life, he agreed with Mr. Judd in the great utility of constructing the roofs of hot-houses with such an angle that the sun's rays may fall perpendicularly at the particular time the crop is expected to ripen. Mr. Keane remarked that vines raised from eyes produced the best plants; layers, when cut from the parent plant, are deprived of a great portion of sap, the vessels contract, and, consequently, the growth of the plant is much retarded; cuttings are objectionable for nearly similar reasons. He objected to butcher's garbage, as vines would grow too luxuriant to fruit the first season; would also, in pruning them, cut down to two buds, and take particular care to force them gently that the buds may break regularly. He observed, when vines were planted outside, and heat applied to the house, they were excited to put forth shoots; the sap was elaborated by the leaves, and when it descended to the roots it was chilled by the cold; the circulation was retarded until the roots were excited by the influence of the sun, when the sap was propelled through the branches to cause a second growth, which, for want of regularity of temperature, must be injurious to the future crop. He objected to the system adopted by many gardeners of cutting away so much wood at their winter prunings, as he preferred to regulate the tree by nipping off all superabundant wood in the summer. Mr. Caie also objected to the system of cutting out much wood. In pruning all trees and plants, their habits should be properly understood; a proper equilibrium should be kept up between the roots and the branches. He always saw the best crops of grapes grown upon small short-jointed and well-ripened wood. That the cause of vines pushing out strong, rampant, and unproductive shoots, was to be attributed to improper pruning, through an ignorance of the principle of what the tree is able to bear. Mr. Judd remarked, in objection to Mr. Keane's observations, that he preferred to cut back and allow four eyes to remain; as there would be a better chance, if it so happened that one or two of them failed to swell. In forcing vineries, he always covered the borders to

excite the roots, as the success of the crop most essentially depended upon the proper temperature of the roots. From the regularity of temperature, he never saw a shanked bunch of grapes in the pot culture of the vine. Mr. Caie agreed with Mr. Judd, that the shanking and shrivelling of grapes were principally caused by an unequal temperature, as in late vineries he scarcely ever saw a shanked bunch of grapes. Mr. Keane was decidedly opposed to the coiling system of growing vines in pots, a system which by unfair means was puffed into public notice. Many of the magazine-reading gentry expected their gardeners ought to grow them as well as they were reported to be grown at Welbeck; and, as they had not the opportunity of sending scores to the rot-heap, their failures were charitably attributed to their ignorance. (*Gard. Mag.*)

ART. III. Domestic Notices.

Echinocactus Eyriésii.—In my last communication, on the flowering of the *Echinocactus Eyriésii*, in the green-house of Mr. F. Putnam, I mentioned that two or three woolly protuberances were visible, which were then considered to be flower-buds: two or three have proved the presumption to be correct, as they have since expanded their beautiful and fragrant flowers. The growth has been nearly imperceptible from day to day, until Tuesday, June 9th, when it began to be very rapid, and thus continued unabated to the time of expansion, which took place on Thursday afternoon, June 11th; at seven, that evening, it was fully expanded, and on the next day, as with the others, it was entirely closed by sunset. There are two more similar buds on the same plant. The seed vessels of the three preceding flowers are considerably swollen; the stems and petals still pendent, though very much shrivelled. A continuation of the account of this highly interesting and curious plant, during its period of flowering, I will send you, if desirable.—*Yours, &c., Y., Salem, June, 1840.* [Our correspondent will oblige us by continuing his notice of this beautiful species.—*Ed.*]

Yucca gloriösa.—A fine specimen of this showy plant is now opening its blossoms in the garden of Mrs. Bigelow of Medford. It will probably remain in beauty a week or two, and will be well worth seeing by every lover of plants. We shall endeavor to give some account of it in our next.—*Ed.*

The Middlesex Horticultural Society, at Lowell, held one of its exhibitions on Wednesday, June 17th. The exhibition was well attended, and a great variety of flowers and fruits were exhibited. We shall give some account of the meetings throughout the season in our December number.—*Id.*

Essex County Natural History Society.—The annual meeting of this society was held in Salem on Wednesday, June 17th, on which occasion there was a fine exhibition of flowers at the society's room. Among the articles exhibited was a Norfolk Island pine, (*Aracaria imbricata*), four years from the seed, exhibited by Mr. Driver. In the evening an address was delivered before the members and others by Professor Russell, of Chelmsford.—*Id.*

ART. IV. *Massachusetts Horticultural Society.*

Our report of the transactions of the Society being incomplete, we have brought them up to the present date, by copying the same from the records of the Secretary.

Saturday, March 7th.—This was a stated meeting of the Society. William Oliver, Vice-President, in the chair.

The Treasurer's report on the estimated income and expenses of the Society for the current year, was read and accepted. The Treasurer was instructed to subscribe for Hovey's *Magazine of Horticulture*, from the commencement of the third volume, (the first and second having been presented to the Society by the Editor;) and also to subscribe for the *Yankee Farmer* from the commencement of the present year.

Messrs. T. Lee, W. Oliver, and S. Walker were appointed a committee upon the subject of procuring a new diploma for the Society.

Messrs. L. P. Grosvenor, R. Manning, and B. V. French were appointed a committee to consider the subject of procuring casts of fruits for the use of the Society, and report at a future meeting.

The sum of three hundred dollars was voted to be appropriated as premiums for 1840, to be distributed as follows:—one hundred and twenty-five dollars for the Flower Committee—one hundred and twenty-five dollars for the Fruit Committee—and fifty dollars for the Vegetable Committee.

The premium of twenty dollars for destroying the rose slug, (in connection with that offered by Mr. Lee, who liberally paid one half the amount,) was voted at this meeting. See p. 233.

Messrs. J. J. Dixwell and A. Bowditch, of Boston, were admitted subscription members.

March 26th.—This was an adjourned meeting from the last. Mr. Vose, the President, in the chair.

Presented.—Van Bergen's *Address*, and Mr. Dean's *Eulogy*, on the life and character of the Hon. Jesse Buel, delivered before the Horticultural Society of the Valley of the Hudson.

Mrs. Bigelow, of Medford, was unanimously admitted an honorary member.

Aaron Willard, of Boston, was admitted a subscription member.

April 18th.—An adjourned meeting. Mr. Vose, the President, in the chair.

Z. Hosmer, of Boston, was admitted a subscription member.

April 25th.—An adjourned meeting. The President in the chair.

Read.—A letter from Mr. Dabney, Consul at Fayal, accompanied with a donation of tropical fruits. The thanks of the Society were voted to Mr. Dabney. A letter from Henry Sheafe, accompanying a donation of peas and lentils, received from Germany. It was voted to distribute the seeds among the members.

May 23d.—Adjourned from April 25th. The President in the chair.

It was voted to give notice of the weekly meetings of the Society by publishing the same in the Daily Advertiser, and Evening Transcript, twice a week for two weeks, and in the Evening Gazette once a week for two weeks.

William C. Bond, Jr., of Cambridge, was admitted a subscription member.

May 30th.—*Exhibited.* Flowers:—From S. Walker, bouquets of pæonies, roses, *Lychnis Flos-deculi*, &c., with a fine display of new and beautiful pansies. From A. Bowditch, large and showy bouquets, composed of geraniums, roses, *Scabiosa atropurpurea*, and pansies. From Rufus Howe, bouquets. From J. Hovey, Roxbury, bouquets. From J. A. Kenrick, large bouquets. From Hovey & Co., bouquets. From Misses Sumner, bouquets. W. Kenrick exhibited a very fine collection, some of which were as follows:—*Fris*, four kinds, *Pædnia*, four kinds, *Lahurnum*, yellow flowering horse chestnut, Harrison's yellow rose, *Hemerocallis flava*, purple beech, and *Wistaria Consequana*, the blooms cut from a plant growing in the open air, unprotected. From Dr. Eustis, a fine specimen of *Erica ventricosa*.

Native flowers:—From Dr. T. M. Harris, perfect specimens of *Convallaria trifolia*, and *canadensis*, *Dracæna borealis*; these were accompanied with a letter which appears at p. 245. From a lady, a large collection of indigenous plants, among which we noticed *Azalea nudiflora*, *Myosotis palustris*, *Triosteum perfoliatum*, *Viola acuta* and *pubescens*, *Aralia nudicaulis* and *hispida*, *Hypoxis erecta*, *Convallaria trifolia*, *bifolia*, *stellata*, *racemosa*, *multiflora* and *canaliculata*, *Trillium cernuum*, *Medeola virginica*, *Calla palustris*, *Sarracenia purpurea*, *Cistus canadensis*, *Arethusa bulbosa*, *Fris versicolor*, *Silene pennsylvanica*, *Pedicularis canadensis*, *Geranium maculatum*, *Anemone thalictroides*, *Nuphar* sp. *Aquilegia canadensis*, *Arum triphyllum*, *Lepidium virginica*, *Nymphæa advena*, and *Krigia virginica*; together with a variety of other species, including ferns,—in all, fifty-eight different species.

June 6th.—This was a stated meeting. The President in the chair.

Read.—Communications from Messrs. Walker and Haggerston on the subject of increasing the premium for the most successful method of destroying the rose slug. They were referred to a committee consisting of Messrs. Walker, Haggerston and Aspinwall, with instructions to report at the next meeting. A communication was read from C. R. Dilloway, respectfully requesting the Massachusetts Horticultural Society to subscribe for the *Journal of the Natural History Society* of this city. Referred to the Committee on the Library.

Presented.—From Joseph Breck & Co. seeds of the Coontee Roots, (or Bread Root,) of Florida, received from H. L. Ellsworth, Esq., secretary of the Patent Office, Washington.

W. W. Cotting was admitted a subscription member of the Society.

Exhibited.—Flowers: From Hovey & Co., splendid double dwarf rocket larkspur, from plants, the seeds of which were planted in September last; also, bouquets. From W. Kenrick, fine bouquets of pæonies, roses, &c. From J. Hovey, bouquets. From A. Bowditch, bouquets of geraniums, pansies, and other flowers. From J. A. Kenrick, a fine display of hardy azaleas, of several varieties. Mr. Kenrick has a good collection, and flowers them in great beauty; also, *Dictamnus fraxinella*, *Robinia hispida*, *Phlox suaveolens*, *Magnolia acuminata*, *Cytisus Laburnum*, *Caprifolium Douglasii*, and yellow roses. From M. P. Wilder, one dahlia. From S. Walker, beautiful pansies, and bouquets. From T. Lee, *Dahlia repens*, a new annual species, with small single purple flowers.

Native Plants.—From Dr. E. Wight, Boston, a great variety of indigenous plants, collected in Dedham. From E. Weston, Jr. and F. Parker, a collection of indigenous plants.

Vegetables.—From Mrs. T. Bigelow, Medford, early Washington peas, (planted March 10.) From J. L. L. F. Warren, cucumbers.

June 19th.—An adjourned meeting was held this day. The President in the chair. Mr. Walker, from the committee appointed at the last meeting, to consider the expediency of increasing the premium, offered by the Society, for the best method of destroying the rose slug, submitted the following report, which was read to the meeting:—

The committee to whom was referred the communication of Mr. Haggerston, offering fifty dollars, (provided the Massachusetts Horticultural Society would add the same amount) as a premium for the destruction of the rose slug, beg leave to report that they have attended to that duty. The committee recommend that the Society accept the proposal of Mr. Haggerston, and offer a premium of one hundred dollars, in addition to the sum of twenty dollars already offered by the Society, for the effectual destruction of said slug: the premium to be paid whenever satisfactory evidence shall be given to the Society of a plan to destroy or to prevent the ravages of the slug, without injury to the bush or its foliage.—Per order, *S. Walker, Chairman*.

The following are the communications alluded to:

Roxbury, June 3d, 1840.

Sir—I have the honor to transmit the enclosed communication, addressed to me from Mr. David Haggerston, of Watertown.

The slug, that has for several years past destroyed the foliage of the rose bush, is well known to every practical florist in this section of the country; its destruction by various means has been attempted, but as yet without success.

The additional premium now proposed, if it should receive the sanction of the Massachusetts Horticultural Society, will give a fresh impetus to the exertions of those who have so far labored in vain to destroy this eye-sore, the rose slug; and will probably call into the field an army of Flora's living subjects, who will not, I trust, lay down their arms until they shall have annihilated the foul defacer of the mantle of the "queen of flowers."—*I am, Sir, with great respect, your obedient servant, S. Walker, Chairman Committee on Flowers.*

Hon. E. Vose, Pres. Mass. Hort. Society.

Watertown, May 26th, 1840.

My Dear Sir: In conversation with a gentleman since I saw you, I mentioned to him the intention of the Horticultural Society of offering a premium for the destruction of the worm or insect that infests the rose bush and destroys the foliage: he was much pleased, and commended the Society for their efforts to accomplish so desirable an object; but when I mentioned the sum intended to be given; *ten dollars*, his idea was precisely mine, that it would result in no good. For the last five or six years he has seen experiments tried, and every thing done that could be thought of, for the destruction of the above insect, without the least success. His idea is, that the premium ought not to be less than *one hundred dollars*, and he wished me to say to the Society that I could procure fifty dollars for the purpose, provided the Society would make it up to one hundred. As it is not at all likely that I shall be at the next meeting, I take the liberty of troubling you, knowing well how much you are interested. If you will have the goodness to make the proposal to the Society, you will much oblige *Yours, very truly, David Haggerston.*

S. Walker, Esq.

Mr. Grosvenor, chairman of a committee appointed a few weeks since, to consider the subject of procuring casts of fruits, reported that the committee had thought the object a good one, and requested that an amount not exceeding fifty dollars, be appropriated to the use of the committee, for that purpose. The report was accepted, and the meeting was adjourned four weeks, to July 11th.

Exhibited.—Flowers:—From W. Carter, pæonies, *Campanula persicifolia*, *Clématis*, roses, magnolia, &c. From S. Walker, pinks, pæonies, (three varieties,) roses, double white sweet rocket, pansies, and fine bouquets. From Messrs. Winship, a great variety of herbaceous plants, and among them roses, and three or four varieties of pæonies. From W. Meller, pinks, roses, pansies, geraniums and bouquets. From John Prince, three varieties of pæonies, viz. *Hûmei*, *frâgrans* and *Whitlêji*. From J. H. Gardener, Roxbury, a plant of *Fuchsia fulgens* in bloom, very beautiful. From J. Hovey, bouquets. From Jos. Breck & Co., sweet Williams, Neapolitan, and rocket larkspurs.

From T. Lee, *Sabbatia chloroides* (cultivated, and a fine specimen,) *Orchis blephariglottis*, *Rhéxia virginica*, *Kalmia latifolia* and *angustifolia*, *Magnolia glauca*, *Lupinus mutabilis*, *Dahlia repens*, dahlias, roses, &c.; Mr. Lee's specimens were very fine, particularly the laurels and magnolia. From S. R. Johnson, a fine collection of tea scented, Noisette, and other tender roses, a variety of hardy roses and pæonies, viz: *Hûmei*, *frâgrans* and *Whitlêji*. From W. Kenrick, *Pæonia albiflora* var. *Hûmei frâgrans*, and *Whitlêji*; several kinds of *Iris*, *tradescantias*, Chinese larkspur, honey-suckles, *spiræas*, Canterbury bells, *Magnolia tripétala*, Scotch, and other varieties of roses, &c. From R. Howe, roses, pæonies and bouquets.

From Hovey & Co., cut flowers of *Echinocactus Eyriésii*, *Cæreus speciosissimus*, and *Epiphyllum splendidum*; beautiful double dwarf rocket larkspurs, dahlias, and bouquets. From J. A. Kenrick, a collection of pæonies, roses, and perennial plants.

Native Plants:—From H. M. Parker; we did not have the opportunity to take the names of these.

This was the day set apart for the exhibition of pæonies for premium, and a most superb display was made by the various exhibitors, as may be seen from our report. We should judge that upwards of five hundred flowers were exhibited. Mr. W. Kenrick's display was very fine; a large basket was filled with fine flowers of the *Hûmei Whitlêji*, and *frâgrans*, the handle and outside of the basket being wreathed with roses, &c. Messrs. J. A. Kenrick, Winship, S. R. Johnson, Walker, Carter, Howe, and Prince, also exhibited some excellent flowers. Messrs. Haggerston and Breck were appointed judges, and they made up their award as follows:—

Pæonies.—For the best display of flowers, to William Kenrick, a premium of	\$5 00
For the second best display of flowers, to J. A. Kenrick, a premium of	3 00
No seedling was entered for the prize.	

Fruits:—From the President, fine early Virginia strawberries. From Hovey & Co., specimens of their new seedling, of large size. From J. L. L. F. Warren, Methven Scarlet, Methven Scarlet seedling, and monthly strawberries.

Vegetables:—Cucumbers from J. L. L. F. Warren.

June 20th.—*Exhibited.* Flowers:—From J. Towne, several pots of heaths and other plants, viz:—*Erica arbutiflora*, *ventricosa* and ven-

triedsa supérba, *Savileana*, *longiflora*, *rùbida*, *rùbens*, *curvisflora*, and *cerinthoides*; the four first were the finest plants of the heath we have ever seen; for health, vigor and beauty we never saw finer plants: it would be useless for us to describe any of the kinds; they were each a treasure of themselves; also, *Pimelæa rosea*, *Roëlla ciliata*, *Bouvardia triphylla*, *Gardoquia Hookeri*, and *Fuchsia globosa* and *tenella*. From W. Kenrick, bouquets and roses. From J. Hovey, roses and bouquets. From W. Meller, fine pinks, roses and bouquets. From R. Howe, a variety of handsome roses and bouquets. From A. Bowditch, bouquets.

From S. R. Johnson, tender and hardy roses, both collections exceedingly fine. From S. Walker, superb pinks, pansies and bouquets. From J. A. Kenrick, a grand specimen of *Magnolia macrophylla*; also, pæonies and very fine hardy roses, in great variety. From Messrs. Winship; a large collection of perennial plants, flowering shrubs, roses, &c.: among the shrubs we noticed the *Deutzia scabra*, one of the finest acquisitions lately made to our hardy shrubs. From Joseph Breck & Co. a specimen of *Delphinium Barlowi*, a new and extremely showy perennial species; we have noticed this in our III., p.

Native Plants:—From Dr. E. Wight, a collection of native plants. From a lady, a very large collection of plants, but our list having been mislaid, we are not enabled to give the names.

The premiums on pinks and roses were awarded at this meeting, according to previous notice. The display of roses was very beautiful. Messrs. C. M. Hovey and Joseph Breck were appointed judges for awarding the prizes, and the following is their report:—

PINKS:—For the best display of flowers, to S. Walker, a premium of \$5 00
For the best seedling flower, to S. Walker, a premium of \$3 00

Messrs. Walker and Meller both entered for the second prize, viz. for the best six flowers. Mr. Walker's were decidedly superior, but, according to a vote of the Committee, no exhibitor can take two prizes for the same flower, unless a seedling. The Committee therefore declined making any award of the second prize, but they would adjudge to W. Meller a gratuity of two dollars, in consideration of his fine display of pinks, including several seedlings.

ROSES.—For the best fifty blooms or hardy roses, to J. A. Kenrick, a premium of \$8 00
For the second best fifty blooms, to S. R. Johnson, a premium of 6 00
For the best display of Chinese and other tender roses, to S. R. Johnson, a premium of 5 00

The Committee, also, made honorable mention of the beautiful roses, exhibited by Messrs. Winship, Howe, J. Hovey, and W. Kenrick; some of the blooms among them were the finest in the room.

Fruits:—From Hovey & Co. the finest specimen of their seedling strawberry yet exhibited: the basket exhibited contained about two quarts, all of the berries of which were from three and a half to five inches in circumference. From R. Ward, handsome Methven Scarlet. From J. L. L. F. Warren, Methven Scarlet strawberries. From Messrs. Winship, three kinds of strawberries.

Vegetables:—From J. L. L. F. Warren, peas, seven weeks from planting.

ART. V. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Squashes:			
Chenauques, } per barrel,	1 25	1 50		Bush Summer, each,	6	8	
} per bushel,	50	—		West Indias, per pound. . .	2½	3	
Common, } per barrel, . .	1 00	1 25					
} per bushel, . .	50	—					
Eastports, } per barrel, . .	2 25	2 50		<i>Fruits.</i>			
} per bushel, . .	1 00	—		Apples, dessert, new :			
New, per bushel,	2 00	—		Common, per bushel,	2 00	2 50	
Turnips:				Dried apples, per pound, .	7½	9	
New, per bunch,	8	10		Strawberries, per box:			
Ruta Baga, per bushel, . .	50	62½		Common,	17	20	
Onions:				Meihven Scarlet,	25	37½	
New white, per bunch, . . .	4	6		Wood,	20	25	
Red, per bunch,	4	5		Cherries, per quart:			
Beets, per bunch,	6	8		Common,	9	10	
Carrots, per bunch,	6	—		Extra quality,	12½	17	
Parsnips, per dozen,	—	—		Raspberries, per box:			
Radishes, per bunch:				Common,	20	25	
Scarlet short-top,	2	3		White Antwerp,	25	37½	
Shallots, per pound,	20	—		Thimbleberries, per box, . .	25	—	
Garlic, per pound,	12½	—		Blueberries, per quart, . . .	15	—	
				Green Gooseberries, per qt:			
<i>Cabbages, Salads, &c.</i>				Common,	10	—	
Cabbages, each:				Large,	17	—	
Early York,	4	6		Currants, per quart:			
Lettuce, per head,	2	4		Red Dutch,	6	8	
Beet Tops, per peck,	10	12½		White Dutch,	8	10	
Rhubarb, per pound,	4	6		Grapes, per pound:			
Asparagus, per bunch,	8	10		Black Hamburg (forced) . .	1 00	—	
Peas:				White Sweetwater, (do.) . .	1 00	—	
Common, per bushel,	75	—		Cucumbers:			
“ per half peck,	10	—		Common, per dozen,	50	75	
Marrowfat, per bushel, . . .	1 00	—		Extra size, each,	15	25	
“ per half peck,	12½	—		Watermelons, each,	25	50	
String Beans, per peck,	25	—		Muskmelons, each, (forced,) .	25	37½	
				Cranberries, per bushel, . . .	2 50	3 00	
<i>Pot and Sweet Herbs.</i>				Lemons, per dozen,	12½	20	
Parsley, per half peck,	25	—		Oranges, per dozen :			
Sage, per pound,	17	20		Sicily,	25	37½	
Marjorum, per bunch,	6	12		Havana, (sweet),	50	—	
Savory, per bunch,	6	12		Pine-apples, each:			
Spearmint, per bunch,	6	—		Common,	12½	20	
				Extra quality,	25	—	
				Cocoanuts, each,	5	6	
				Chestnuts, per bushel,	4 00	4 50	

REMARKS.—Since our last, the market has been abundantly supplied with all the various fruits and vegetables of the season, with one or two exceptions; the quantity was never greater nor the quality finer. This is to be attributed to the continued favorable weather of the past fortnight, which, for equality of temperature, has seldom been known; occasional showers have invigorated the earth, until the close of the present week.

In potatoes but little is doing; old ones yet furnish the supply, none of the new crop having come to hand until within a day or two past;

there will, however, be a plentiful supply in the course of a week. New turnips, in bunches, are now received of handsome growth. New white onions rather scarce, but of superior quality. All the old crop gone, except a few bunches of reds. Beets and carrots come to hand of fine size for this early season. Parsnips gone. Radishes are abundant and of good quality. New cabbages have made their appearance this week, but they have yet very small heads. Lettuce abundant and good; it is rarely as fine at this season. Beet tops abundant, but all other kinds of greens are gone. Rhubarb, in small quantities, continues to be received. Asparagus nearly gone. Peas abundant and well filled; marrowfats are very large. String beans are plentiful, and of good quality. Summer squashes are received from New York, and sell at quotations. West Indies are the only kinds of winter squashes which now remain.

In fruit, the market is quite active: winter apples are all gone, except a few russets, which command fifty cents per half peck; a few new apples, of rather inferior quality, from New Jersey, have been received, and sold at quotations. Strawberries have been very abundant, of prime quality, and sold at lower prices than for the past year or two; it is gratifying to see the cultivation of this most delicious fruit extending; some extra Methven Scarlets, Keen's seedling, and Hovey's seedling have obtained high prices; the larger sorts are now going off, and the principal supply is from the wood. Raspberries have just begun to come in. Blueberries, of very large size, have been brought in from Marshfield, in this State. Cherries have been tolerably plentiful, but those of extra quality have commanded good prices. Green gooseberries abundant. Currants plentiful and good. Black Hamburg and white sweetwater grapes have been received the present week; the quality very fair. A small lot of watermelons, from the West Indies, have arrived since our last. Pine-apples abundant from numerous late arrivals, but the quality has been, thus far, very inferior. Cucumbers are now shipped from New York, but fine forced ones command good prices. Cranberries lower, from the quantity of other fruit. Of lemons a good stock. Oranges scarce and high.—*M. T., Boston, June 27, 1840.*

HORTICULTURAL MEMORANDA

FOR JULY.

FRUIT DEPARTMENT.

Grape vines, in the green-house or graperie, will be swelling their fruit rapidly. Give an abundance of air on all fine days and nights. Thinning the bunches may be done now; but the work should be carefully performed; tie in all the new wood, intended for bearing next year, and shorten all the shoots bearing fruit. Syringe frequently, and if dry give the roots good supplies of water, and occasionally liquid manure. Plants in pots will need a good supply as the fruit approaches its full size.

Fruit trees grafted the past spring should be looked to; take off all shoots which spring from the branch below the graft, and prune away the shoots if too numerous. Plums may be budded the latter part of July.

Strawberry beds will need attention. Keep them clear of weeds, and if large fruit is wanted, cut the runners off. Next month new beds may be made, and when it is intended to break up the old ones, look out for a supply of young and vigorous runners.

FLOWER DEPARTMENT.

Dahlias will need attention: pruning, staking the plants, and watering, as well as guarding against insects, will exact from the cultivator some little care. The plants should be well staked, then well tied up, pruned of the laterals, and, if dry weather ensues, watered. The ground should also be kept well tilled, as we find nothing has such a tendency to keep the ground moist as an occasional stirring of the surface, even if there are no weeds.

Geraniums, if not cut down last month, should now be attended to; the cuttings will grow readily if put in.

Carnations should be laid this month, soon after they commence flowering.

Pinks should be propagated by cuttings put under a hand-glass.

Tulips, *hyacinths*, and other winter bulbs, should be taken up, if not out of the ground already.

Roses may be budded successfully this month.

Tree pæonies may be grafted this month, as recommended at p. 242 of this number.

Pansies.—Choice kinds, should now be propagated by pipings, in the same manner of pinks.

Chrysanthemums should be topped early this month, in order to make them bushy plants.

Camellias will need frequent syringing, and occasional supplies of water at the roots of the largest plants.

Cactuses should be now liberally supplied with water. Cuttings may be now cut off and laid away a fortnight to heal their wounds, and then put into pots.

Mignonette seeds should be sown for flowering in October.

Green-house plants, of all sorts, may be propagated.

Calla æthiopica should be treated as recommended at p.

Herbaceous perennials, raised from seeds, should now be transplanted. Seeds of blue bells, sweet Williams, &c. may yet be planted.

Annual plants will need thinning out, pruning, and some of the tall kinds tied up to neat green sticks, and the weeds kept down.

Chinese primrose seeds may be sown now for producing plants to flower during the next winter.

Verbenas, planted out in the open ground, should have their shoots laid in the ground and fastened down with a notched stick or forked branch of a tree; they will flower better and spread more rapidly if this is attended to.

Heaths: cuttings put in in April and May, should now be potted off.

THE MAGAZINE OF HORTICULTURE.

AUGUST, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *On the Slug which infests the Rose Bush.*
By J. E. TESCHEMACHER.

I AM glad to see that the Horticultural Society have offered a premium for an antidote to this detestable insect, which robs the fairest flower in creation of its beauty. But as the Society will probably not award this premium until proof shall be manifest of the efficacy of the methods laid before them, at least a year must elapse before the best of these methods can be communicated to the public; and as I think the following proceeding, if carefully adopted, will annihilate this pest, I do not hesitate offering it now for insertion in your Magazine, that those inclined to try may do so this year.

I will first premise, that I have very strong objections to all poisonous washes;—the first is, that it is difficult to use them without a portion at least falling on the earth, and being washed by rain so as to come in contact with the roots, which will certainly absorb them to the injury of the plants; the second objection is, on account of the accidents which are so liable to occur, from the general introduction and careless use of all violent poisons.

About fifteen or twenty days previous to the first appearance of this slug, a small black fly may be observed settling on the leaves of the rose bush: this is the parent of the insect, and it is then in the act of depositing its eggs; this is done by piercing with its ovipositor (an instrument something like the sting of a bee, but much smaller,) the skin of the leaf, under which an egg is thrust; this is covered with a species of scale. I have most

frequently observed this egg laid on the edge of the leaf, between the serratures; others, however, have found it on the back; this egg adheres very firmly to the leaf.

In about fifteen days the little insect is hatched, and begins at once to feed on the leaf; it is soon covered with a peculiar viscid slime, which appears to afford the insect protection from the most violent heat of the sun, and partly also from powerful rain. This insect remains feeding on the leaves about eighteen or twenty days, during which period it changes its skin about four times, remaining in the last skin five or six days, preparatory to its change into another state; after having devoured all the food, and rendered the rose bush as if a fire had passed over it, the slug falls to the ground and descends into the earth to a depth of about four inches. Here it forms a cell by pressing the earth on all sides, and lining it carefully with a gummy adhesive matter, which affords complete protection against frost and wet; in this state it remains until the following year calls it into life, and the perfect fly rises out of the ground. Although no entomologist, I believe this to be about the proceeding of this insect, and upon it is founded the following remedy.

It has been found beneficial in England to remove rose bushes every three or four years; the practice I propose, therefore, will be found far from injurious. Carefully take up the rose bush, shake every particle of earth from the roots, and plant it in a fresh spot in the garden, where no rose grew before; let it be as far distant from the old spot as convenient; a few yards, however, will suffice, and this may be done either immediately, after the first frost shall have caused the fall of the leaf, or in the spring; then very carefully pare off the surface of the earth where the rose stood to the depth of five or six inches, placing the mould in a wheelbarrow, to be carried to another part of the premises, and there operated on as follows:—

First method.—Mix this earth with an equal quantity of fresh lime, and when well mixed slack the lime with water: the heat arising from this will almost certainly destroy the animal in its cell. But the second method is the most sure.

Prepare with loose bricks three or four furnaces, so near each other that they may be covered with thin plates of iron laid on; these furnaces are made by piling the bricks loosely on each other, leaving interstices between them for the draft; make a good fire in each, either with wood or charcoal, lay on the plates of iron, and on this place a thin stratum of the earth: urge the fire until the plates of iron are nearly at a red heat,

and so on until all the earth is thus baked: this will certainly destroy the animal, but the earth need not be replaced where it was before, but laid aside for some other purpose. With respect to the quantity of surface to be removed around each bush, I should think three or four feet distance all around would suffice, although, previous to the slugs falling off, they are occasionally found on the leaf of an adjacent plant.

That the removal of the rose bushes keeps them clear of the slug, has been abundantly proved this year and last, by the fine collection removed from Marshal P. Wilder's garden to the Public Garden on Charles street, where they have been perfectly free from slug, or any other insect, when at Mr. Wilder's the same bushes were infested equally with those of his neighbors.

The earth thus baked is not rendered unfit for other purposes; on the contrary, from recent experiments in vegetation, in different earths, the probability is, that it is rather improved.

Yours,

J. E. T.

Boston, July 16, 1840.

We are highly pleased in laying before our readers the remarks of a gentleman who has so attentively observed the habits and character of the destructive insect alluded to, as Mr. Teschemacher. Our opinion in regard to the destruction of most insects has been, that, unless they are destroyed by manual labor, actually picking off every one by the hand, there was no other way to effectually get rid of them but by prevention. The canker worm cannot be destroyed when feeding upon the tree, but the larvæ can be easily prevented from ascending to the branches and depositing their eggs there, and the foliage saved from their voracious depredations.

The same remark will apply to the rose slug. The liberal premium offered by the Massachusetts Horticultural Society will incite investigation into the habits of this insect, and perhaps some method may be accidentally discovered, by which they may be easily and effectually destroyed without damaging the bush; but of this we have our doubts. The only sure method will be to destroy the insect in its pupa or chrysalis state, so as to prevent the perfect insect from ever emerging from the soil and laying its eggs upon the bush; that this plan of proceeding will effect the great and desirable object, we are very certain, though we are not ready to say in what manner this can be the most readily performed. Mr. Teschemacher's method appears to be one which can be easily carried into effect; and we shall be happy to see his experiment fairly and

thoroughly tested, by some person who feels sufficient interest in the destruction of the slug, to learn whether his or any other probable plan will succeed.

In England we cannot learn, from a very thorough examination of their principal works, and among them one of the latest and most complete, Loudon's *Arboretum Britannicum*, that cultivators there are troubled with an insect like the one in question; the bushes are destroyed by the aphides, the green caterpillar, and some others, but no allusion is made to any insect which destroys the plants in such a manner as to leave them with the blighted aspect which usually takes place when they are numerous. The insect must be peculiar to this country.

We have not the space, in these few remarks, to enlarge upon this subject. We hope it will be taken in hand by energetic and zealous cultivators, and that, before many seasons have passed away, we may be enabled to see the roses of our gardens blooming in the luxurious beauty of oriental splendor.—
Ed.

ART. II. *An Account of the origin, cultivation, &c. of Hovey's Seedling Strawberry; with a description of the fruit, accompanied by an engraving.* By the EDITOR.

IN our third volume (p. 241) we have given an article upon the production of new varieties of strawberries from seed: in that paper we so fully detailed the practice which we pursued in producing young plants from seed, that it would seem hardly necessary to repeat the same here; but as many of our present readers may not have seen the volume containing the article alluded to, we shall, for the sake of following up the history of the fine new variety named at the head of this article, give an account of its growth, from the time of planting the seed to the ripening of the crop of the present year. We shall even go back farther, and speak of the method we pursued in preparing the parent plants for producing the fruit from which the seeds were selected. We shall endeavor to avoid repetition as far as possible, and shall add any information which we think may be of benefit to others who may be desirous of procuring new varieties from the seed.

We have, in the article alluded to, spoken at some length upon what we consider an important subject, viz. the production of new varieties of strawberries from seed, to take the place of those older kinds, principally of foreign origin, which have long been cultivated, and which, either from defects of cultivation, the severity of our climate, or other causes, do not produce sufficiently abundant to repay the labor and expense of their growth. To varieties originated in this country we must therefore look for fruit, so superior in every good quality, as to eventually drive out of cultivation those old sorts, whose growth and product is at the best uncertain, and whose treatment, to be attended with success, must be the result of a great deal of care and attention. Considering the short period at which strawberries begin to fruit from the seed, it appears somewhat singular that no more attempts have been made in the production of new varieties. Mr. Keen, the originator of Keen's seedling, has been the most successful in his attempts to raise new ones. The late Mr. Knight also raised some new varieties, which have been said to possess merit; but they stand below Keen's seedling, which is now almost universally cultivated in England. Without extending these preliminary remarks at too great length, we come now to the production of the variety in question.

After cultivating the Keen's seedling, Downton, Methven, Southborough, and other sorts, we became well satisfied that neither of them possessed such qualities as would render them profitable kinds for ordinary cultivation: the vines of the first were too tender, and there was always danger of losing part of the crop: the second, though a good sized and fine flavored fruit, was uncertain in its product; the vines containing both barren and sterile plants, rendered it objectionable on that account: the Methven was a rather insipid, though a large and showy fruit; and the Southborough, a handsome looking berry, was too shy a bearer to depend upon. There seemed to be wanting a variety combining the qualities of two or more of these, and we set out upon the experiment of attaining this desirable result, determined, if time would allow, to pursue it until our object was accomplished: how far our labors have been crowned with success, will be seen in the course of our remarks.

In pursuance of this object, we immediately set about preparing the plants which we intended to produce the fruit from, whence the seeds were to be saved. At that time (1832.) we cultivated, in addition to the kinds above mentioned, the Early Virginia, Melon, Bostock, Grove End Scarlet, Knevet's Pine, Royal Scarlet, Mulberry and Hautbois—twelve kinds.

Two or three plants of six of these kinds were selected from the rest, choosing only the strongest; the soil was loosened up around them, and no others allowed to grow within fifteen or twenty inches: during summer, as they emitted runners, they were taken off with a pair of scissors, and great pains were taken to encourage the plants to make a vigorous and robust growth, in order that the fruit, the succeeding year, might be as large as each variety was capable of producing. On the approach of winter, the plants, having been well tilled as late as the ground would allow, were protected with a covering of leaves, &c., until spring.

Early in April the covering was taken off, and the soil around those destined for the seed was immediately loosened, in order to give the plants every chance of a good growth: every runner which made its appearance was pinched off, and the plants soon threw up very strong flower stems; these were soon after divested of all their flower buds, except two, and those at the base of the truss, where the fruit is always the largest; the plants were duly watered, and, as soon as the flowers began to open, preparations were made to impregnate each of them with other varieties. As this is a very necessary part of the operation, to obtain fruit that will differ from the parent, we shall detail the method of proceeding:—

As soon as the flowers are fairly expanded so that the anthers may be seen, with a sharp pointed pair of scissors cut out carefully, so as not to injure the blossom, every anther in the flower; by doing this the plant will be deprived of all means of setting its fruit, and there would be no berry unless the stigmas were impregnated by the pollen from other flowers—this was done: a camel's hair pencil is the best thing for this purpose, although we have accomplished it with a penknife. Remove carefully the pollen from the flower you wish the variety to be impregnated with, and place it upon the stigmas of the flowers which are to produce the fruit; let the operation be done with care, and as soon as finished tie a piece of gauze over the flowers to keep out the bees and other insects, or they might bring the pollen from other flowers near by: this done to each plant, all is finished for some time.

When it is perceived that both fruits have swelled well, and that the impregnation has had its proper effect, one of them should be taken off; that which has the appearance of forming the best shaped berry should be allowed to remain, if, otherwise, it is large and perfect; for it should be the object of the cultivator to save seed from only the best shaped fruit. The plants should now be well watered, occasionally with liquid manure, and, as the fruit swells to maturity, a little

hay or straw should be placed under it to keep it from the ground. Every runner upon the vines must be kept cut off, and the surface well tilled. The fruit will be ripe in the middle or latter part of June, and as soon as picked the seeds should be washed carefully from the pulp, and after being well dried in an airy situation, placed away in close paper bags, to be planted in the spring. This is the manner in which we procured the seed, and the following is the table of the various crosses, taken from our Journal of 1833:—

No. I. Methven Scarlet, impregnated with Keen's seedling.

No. II. Methven Scarlet, impregnated with the Melon.

No. III. Mulberry, impregnated with Keen's seedling.

No. IV. Mulberry, impregnated with Keen's seedling and Melon.

No. V. Southborough, impregnated with the Prolific conical Hautbois.

No. VI. Grove End Scarlet, impregnated with Keen's seedling.

1834.—Early in February of the year 1834,* preparations were made for planting the seed: four boxes, each about six inches deep, six wide, and twelve long, were filled with a rich soil, composed of loam, leaf mould, or well decomposed manure, and sand; the sand was added to guard the plants against damp, as we feared that a too retentive soil, at that early season, might place them in danger. We found our precaution a safe one; as some of the weaker seedlings died, and more would have gone, but for the light nature of the soil, and an inch of good drainage, (which should be particularly attended to, each box having three holes for the outlet of all superfluous moisture.)

In about a fortnight the plants began to appear above the soil, and continued to come up, until the whole were removed from the boxes into the open ground in May. In two of the boxes two kinds were sown in each, and in the other two one kind each, from the greater quantity of seed; the seeds were barely covered with fine soil, and the boxes placed upon the front shelf of the green-house, where they stood until removed to the garden. Each lot of seeds was tallied according to the table above given. In March the plants were carefully watered, and not too much given at once: the seedlings are very

* Upon reference to our Journal, we find that the seeds were planted in 1834. Trusting to memory, we have stated previously, that they were planted in 1835.

small and delicate, and require attention, or a loss of the whole would be the result.

Early in May a bed was prepared in the garden for the planting out of the whole of the seedlings; the soil was well dug and enriched, and the plants were set out in two continuous rows, about one foot apart, with a tally designating each kind. In this new situation they soon threw up strong leaves, and the runners began to appear, all the strongest of which were allowed to root; the object being to get a small bed, in order that the quality of the fruit and character of the plants could be more readily determined from several than from one. The beds were kept clear of all weeds, and the soil frequently hoed as close to the plants as the runners would admit of. By autumn they had covered over a piece of ground two feet wide, and many of the plants appeared sufficiently strong to bear fruit. On the approach of frost a very slight covering of partly decayed leaves was thrown over the bed; more in order to prevent the weaker plants from being thrown out of the soil, by the action of the frost, than from a fear of losing them by the severity of the weather.

1835.—Early in April the coarser portion of the covering was removed from the bed; the finer part serving as a manure to encourage the growth of the plants. In the course of a week or two, a few of the strongest plants began to throw up their flower stems, and soon after expanded their blossoms, but the number which did so was but small compared with the quantity of plants: it was thought no fair estimate of the fruit could be formed until another year. The plants were then kept clear of all weeds as in the preceding year, but the runners were allowed to extend and fill up the bed. A barrow full or so of old manure was thinly scattered over the bed for the same purpose, as in the preceding winter.

1836.—Not a plant, to our knowledge, was injured by the winter, though some of the weaker ones might have died. The plants had now extended about six feet in breadth, and so vigorous as to show an abundance of blossoms, and in May, after the fruit had well set, there was a large and promising crop. The latter part of June the fruit attained maturity, and the beds were looked over with the utmost attention, and, as we flatter ourselves, with some degree of discrimination, in order to ascertain the real qualities of the different sorts, as compared with each other, of which no two appeared to be alike, and with the parent varieties.

For this object we made a memorandum of every fruit which appeared to be distinct, putting down all its qualities, and we

only regret that, from some cause, it has got mislaid, so that we have not the opportunity of showing the very great difference in the fruit of the plants which came from the seeds from one berry. Some were entirely worthless, not setting scarcely a fruit; others were abundant bearers, but small; some were large, without flavor, while others were small and of delicious taste. The number which we described in our memorandum, as possessing very excellent qualities, even better than many of the old sorts, exceeded *twenty-five*; but our zeal would not allow us to be content in only equalling the old sorts: if we could not surpass them, it was our determination to destroy the whole. But our hopes were fully realized: there was one plant which produced a truss of fruit, the largest berry of which completely astonished us; it surpassed our own expectations, and surprised all who saw it; though the plant was small, and crowded in among others, the fruit measured five inches in circumference.

As the different fruits were tasted and their qualities noted down, a stake was placed in the ground close to each of the different plants, in order that the first runners might be taken off, or each plant removed to a place by itself, where it could extend its runners. The number was so great, however, that, for want of room, they were neglected until the season was so late as to render it advisable to postpone it until the spring. The stakes remained by the plants, and the whole bed of seedlings was left completely exposed throughout the winter, the thermometer falling below zero more than fifteen times, and on one occasion down to 10; but we did not notice that the plants suffered any material injury.

1837.—As soon as the plants had begun to grow, one of the runners of the vine, which produced the large fruit, was taken up into a pot: the old plant had become so exhausted from throwing out runners, that it would not have done so well as the young one; and during winter the runners had become so decayed, that only one single plant could be traced back to the parent with any certainty; and, rather than run the hazard of taking those in near proximity to the old one, we contented ourselves with the solitary plant. This was planted in a No. 2 pot in April, shifted into a No. 3 in May, into a No. 4 in June, and the latter part of the month turned out into the ground. The plant, when taken up, was very weak, and it did not make a runner until July; and from that time to September only twelve good strong plants were produced. In November a handful of leaves were thrown over the plants, which were under a south fence, to prevent their being dam-

aged by the warm sun in March; for it is at that season of the year that the plants receive the greatest injury, and not in mid-winter, and by the extreme severity of the cold, as many suppose.

1838.—In the latter part of April, a small spot of soil, three feet wide by twelve long, was enriched and deeply dug, to receive the twelve plants. They were carefully removed, with a small ball of earth attached to the roots, and received no check in the operation. The plants soon grew vigorously, and began to extend their runners, as there was no fruit to exhaust the plants; with occasional assistance of the hands in spreading out and laying in the newest runners, the bed was well filled with plants by October: when the weather proved dry, a slight watering was given, to enable the young runners to take quicker hold of the soil. In November a barrow load of old hot-bed manure was strewed among the plants, but they were not covered.

The old bed of seedlings produced an abundant crop of very large fruit, among which there was, undoubtedly, some of the selected variety. The specimens were so large, that the Massachusetts Horticultural Society awarded them the premium. Two other kinds, possessing peculiar qualities, were taken from the bed subsequently: these are now in course of trial, and, though not so large as the one we are treating of, are excellent compared with the Virginia and others. In August the whole of the old bed of seedlings was turned over with the spade, and not a plant remained.

1839.—It has never been our good fortune to see a bed of strawberry plants present the same vigorous aspect and promising appearance as this seedling. Nothing was removed from the bed. The plants darted up through the thin surface of manure, and, in the course of a week or two, not a spot of soil in the bed could be seen. The flower stems shot up with bold and prominent buds, and the most enthusiastic cultivator could not have desired any thing more promising. By the time the fruit was setting, the foliage was so tall and strong, that not a truss could be seen without opening the leaves. No water was given, but the fruit continued to swell rapidly; and the 24th of June, a few berries on the outside of the bed were ripe. On the 29th, three or four quarts were gathered of extraordinary size. They were exhibited at the Massachusetts Horticultural Society's Room, and were awarded the premium. The fruit continued to hold out until the 15th of July, when the last was gathered, leaving, however, some scattering berries.

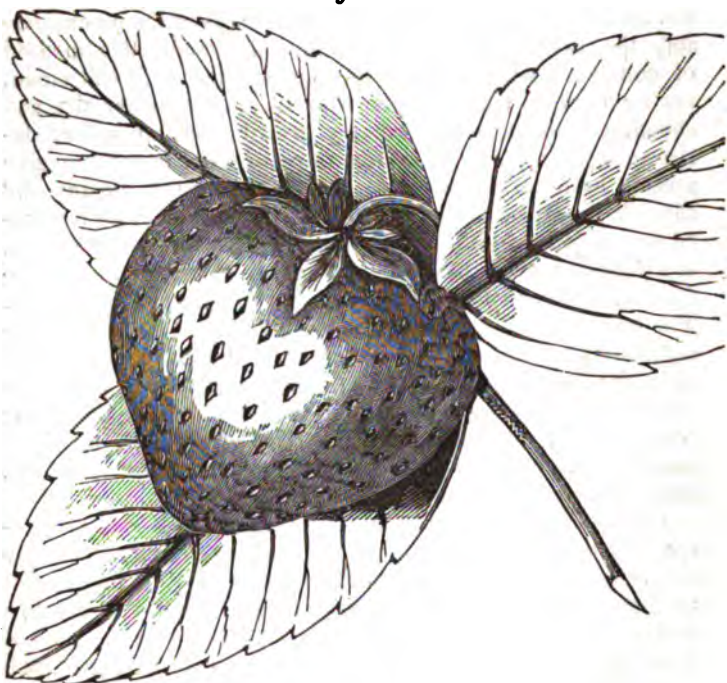
Excelling even our own expectations, we felt desirous, in order that there could be no mistake, to try them another year. And, in order to do this, two feet of ground all round the bed was spaded over, into which the runners might extend and root; there was an abundance of them, and the whole space was so thickly covered with vines as to weaken them considerably the past fruit bearing season. Although this method of cultivation will not show to what size the fruit will attain, yet we were so well satisfied with its extraordinary size and abundant product, under ordinary growth, that we had no desire to resort to any high system of cultivation, in order to give greater value to the variety. Surpassing, as it already did any other, we had no doubt but that its size might be increased one third by a judicious course of treatment, and we hope, in a year or two, to have the pleasure of showing some of the fruit, much exceeding in size any that we have yet produced. The bed received no protection during winter, other than filling in between the young runners where they had rooted almost upon the surface of the soil. We might remark here, that this is a very important thing with all strawberries: the young plants rooting almost upon the surface of the soil, the frost generally throws them so much out of ground as to ruin them, even when the old plants do not suffer.

1840.—We should only be repeating what we have said respecting the bed last season, to state the promising appearance and vigor of the plants. It will be sufficient to remark, that another year's trial more than confirmed the results of the two previous seasons. The first fruit was gathered on the 13th of June, and subsequently, every few days, several quarts each time. On the 20th, a basket of the fruit, containing about two quarts, was exhibited at the room of the Massachusetts Horticultural Society, and commanded the admiration of every individual who saw them. There was not a strawberry which measured less than three inches in circumference, and from that up to five and a half inches. Cultivators who had grown the Methven, Downton, Keen's seedling, &c. were astonished at the extraordinary size, regular form, and handsome appearance of the fruit. The good opinion we had formed of the fruit was fully established.

Thus far we have given all the particulars of the production of this variety, and those who have leisure to try a similar experiment, may safely rely upon the truth of our remarks. Should we again have the same time to devote to such pursuits, as we had at the period when we commenced the raising of this seedling,

we shall continue our attempts at the production of seedling plants. We shall now add a description of the fruit, accompanied with a correct engraving of the same. (Fig. 9.)

9



FRUIT, very large, round or ovate, slightly conical, never coxcomb shaped, even in the largest berries. **COLOR**, deep shining red, paler when growing in the shade. **SEEDS**, inserted in a slight cavity. **FLESH**, scarlet, firm, abounding with a most agreeable acid, and exceedingly high flavored, juice, not surpassed by any other variety. **FOOT-STALKS**, long, elevating the fruit from the ground, and every berry setting and attaining a good size. **LEAVES**, large, and rather light green. **VINES**, very vigorous, more so than any other variety, and perfectly hardy. It ripens about a fortnight after the Early Virginia, and a week after the Keen's seedling and Methven, and continues in fruit ten days after the latter are gone.

In some varieties of strawberry there are both sterile and fertile plants, generally termed male and female. The Downtown, Bishop's Orange, Hautbois, and some of the scarlets,

are instances of this, and the want of a knowledge of this fact has heretofore occasioned much disappointment in the cultivation of these varieties. This is not the case with this new seedling; every flower is perfect, and has a due proportion of both stamens and pistils, and every blossom which expands is followed by a fruit which arrives at maturity. It is thus rendered more valuable from this circumstance. To preserve a proper proportion of male and female plants in a large or small plantation, and not allow the former to overrun the latter, which they frequently do, from the vigor of the plants, is attended with more care and labor than most cultivators are willing to bestow upon the plants. It is from this cause that the Downton and other sorts, though good fruits, have been discarded from collections, and their place supplied with others which yield a more certain crop.

It will not perhaps have been noticed, that we have not yet stated from which of the above crosses (p. 287,) this variety was produced. It has been a source, to us, of much regret, that we have not been enabled to state this with any certainty. The labels which were placed in the boxes were very small, and were written out as in the table above given; and these labels were transferred to the ground when the plants were placed in the beds, with the intention of replacing them with larger ones in the course of the season. But while conducting a multitude of similar experiments, this was forgotten, and in the spring, when the plants produced fruit, and the original labels were sought after, it was found that the frost had thrown them out of the ground, and the heavy rains had so displaced them, that it was impossible to discover their original situation. We can however state, that the variety originated from one of the four first crosses, and in all probability from the No. I. or IV., and we have always thought from the latter. We discover in it the large size of two of the parents—the fine form and beauty of the Melon—the color, flavor, and productiveness of Keen's seedling, and the hardy character of the Mulberry. It is the opinion of Mr. Knight, that a plant can be fertilized with two or more kinds, and the progeny partake of the character of both. He even demonstrated this as we have elsewhere stated, (Vol. III., p. 101.)

We have been questioned so frequently by amateurs and others, respecting the productiveness of this new variety, that we have been thus particular to detail every thing connected with its growth and cultivation. We have also been minute, because there exists, with many, very erroneous ideas, not only in regard to the production of seedling strawberries, but to

294 *Good effects from digging the soil in dry weather.*

seedling fruits, vegetables, and flowers of all descriptions. The process of hybridization is but yet in its infancy, and though carried to some extent by Mr. Knight and others, no fixed rules have yet been laid down, as a guide to successful results.

ART. III. *On the good effects resulting from frequent digging of the soil in dry weather.* By T. DUNLAP, New York.

SOME time since I promised to contribute, at your request, an occasional article for your interesting Magazine. As the present season has been unfavorable for our crops generally, flowers as well as vegetables, in consequence of the long continued drought, I have taken the liberty of giving a few hints, which I trust may be of some service to a few of your readers. I have for several years tested, to my satisfaction, the advantage of digging every ten or twelve days, in preference to watering, which is the general mode resorted to in a continuance of dry weather, between crops of any kind, where practicable; it not only causes more abundant crops, than all the water that can be daily administered, but is a saving of one half in labor, besides giving the surface of the soil an air of culture, which is a great point gained, were there nothing else to recommend the practice.

Should any of your readers think my ideas visionary, let them, before they entirely condemn the present hints, try the experiment, upon a small scale; should it prove a failure I will frankly admit that the old method of watering is preferable, but, until then, I maintain that digging occasionally, as above stated, will add greatly to the appearance of the garden, will afford much greater crops, and last, though not least, will cause the soil so managed to retain its moisture in a much greater degree than if an equal amount of labor was spent in the old method of continually administering water.

I am, dear Sir, with much respect, yours,

T. DUNLAP.

New York, July, 1840.

ART. IV. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Horticultural Journal, and Royal Ladies' Magazine. In monthly numbers, with one or more plates; 1s. each. Edited by George Glenny.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Floricultural Intelligence. *Mr. Towne's fine collection of Heaths.*—We regret to announce to our friends and lovers of plants, that this beautiful and rare collection of plants, particularly of heaths, of which there were upwards of seventy species and varieties, belonging to our friend and correspondent, John Towne, Esq. of Boston, was entirely disposed of at auction, on Wednesday, July 25th, at the Rooms of the Massachusetts Horticultural Society. The Society's Room was obtained, both for its location and the excellent opportunity it afforded of arranging the plants so as to be easily seen by the purchaser. The sale was tolerably well attended by amateur cultivators and nurserymen; and though the plants sold at a price much less than their actual value, still we think that many of them, considering the state of the times, sold at fair prices.

With the sale of the plants Mr. Towne, for the present, retires from his favorite pursuit. Various circumstances will prevent his forming such another collection for some time; and even if he were desirous to do so hereafter, we doubt whether he would find more than half of the kinds he has now disposed of, and which he has been at great expense and much labor to procure, alive. The plants were bought by various individuals, and the collection pretty generally distributed.

The article on the *epacris* and *heath*, which Mr. Towne

communicated in the pages of our last volume, (V., p. 376,) has been the means of rendering them much less difficult of cultivation than heretofore, and they are now becoming a more fashionable flower. A list of the species and varieties in Mr. Towne's collection has already appeared in our pages, (Vol. IV. p. 243.) The following are beautiful sorts, which those who purchased should be particularly careful of, viz: *Erica Savileana*, *ventricosa* and *ventricosa superba*, *cassia*, *rubens*, *rubida*, *grandiflora*, *arbutiflora*, *cerinthoides*, *pubescens major* and *minor*, *longiflora*, *versicolor glutinosa* and *ardens*. We believe a goodly number of the best plants have fallen into the hands of H. Gray, Esq., who, we hope, will succeed as admirably as Mr. Towne has done, in their cultivation. Messrs. Hovey & Co. have also purchased fifteen or twenty of the most showy and free flowering kinds, and will probably have, in the course of a year, a stock of young plants to dispose of. We may thus hope that the collection, or a great part of it, which Mr. Towne, during six or eight years, has made the greatest exertions to procure, will not be lost. We intend, at a future time, to give a description of some of the finest, with engravings to represent the comparative beauty of the flowers.—*Ed.*

Cereus coccineus.—A beautiful cereus, under this name, is now in bloom (July 20,) in our collection. The original plant was received from M. Soulange Bodin, of Fromont, near Paris, in the spring of 1837. We have never seen the same flower in any other collection. The plant, in its habit, somewhat resembles *speciosissimus*, but is more slender and less vigorous in its growth, with smaller and a lesser number of spines, rendering it, on this account, a very desirable variety for small collections. The flower is about three fourths the size of *speciosissimus*, very finely formed, each petal smooth and regularly pointed, the outline forming a perfect hemisphere. The lower inner petals have the same exquisite violet tint which renders the *C. speciosissimus* so peculiarly splendid. Blooming at midsummer gives it additional value, as it prolongs the season of bloom, connecting the spring flowering ones with the autumnal blooming *Epiphyllum truncatum* and *Ackermánii*, the latter often expanding a second time in September. It well deserves a place in every select collection of the *Cacti*, and may be ranked, among the colored kinds, next to the *C. speciosissimus*.—*Ed.*

Mrs. Loudon's *Ladies' Flower Garden of Ornamental Annuals* has been completed in fifteen numbers, containing forty-five plates, in which are figured upwards of four hundred

different species and varieties of annuals. It is in quarto form, with two hundred and twenty pages of letter-press, printed on fine paper, the plates beautifully executed and faithfully colored, and is sold at eight dollars the complete volume. Mrs. Loudon is now engaged on a work similar in every respect, except the subject of which it treats. It is called the *Ladies' Flower Garden of Ornamental Bulbous rooted Plants*, to be completed in twelve or more numbers, and the same quantity of letter-press to each, forming a volume of the same size and style as the former. This is also, we believe, to be followed with other works to match them, illustrating every department of ornamental gardening. Mrs. Loudon, as well as the Misses Loudon, have contributed much, in the course of the past year or two, to gardening literature. A translation of *Kollar's Insects*, a celebrated German treatise, has just been completed by the Misses Jane & Mary Loudon, which we shall review in a future number, and make some extracts.

Dr. Lindley's *Theory of Horticulture*, one of his latest works, is highly spoken of by the English Magazines. We shall refer to it again.

Flora of North America.—We mentioned in our last, that the third and fourth parts of this work, by Drs. Torrey and Gray, had just been published. They complete the first volume, which extends to seven hundred and fifty pages, and concludes the history of the polypetalous division of the dicotyledonous, or exogenous plants. We shall probably offer a review hereafter: several genera are introduced for the first time, and the following new ones are established, mostly on the authority of Nutt. They are as follows:—

Pickeringia Nutt. (In honor, we presume, of Dr. Pickering, of Philadelphia, who accompanied the United States' Exploring Expedition,) founded on a Californian plant.

Nutallia, founded on a plant from Oregon. (There is already a genus *Nutallia*, established, we believe, by Dr. Hooker, on a plant found by Mr. Drummond, in Texas. See the *Bot. Reg.*, t. 1938, and our III., p. 219.)

Peraphyllum Nutt., from the Rocky Mountains.

Hypobrichia W. O. Curtis, a plant of the United States.

Eulobus Nutt., from California.

Echinocystis, a plant of the United States.

Discanthéra, a Texan plant.

Solmiea, an Oregon plant.

Jamesia, from the Rocky Mountains, where it was discovered by Dr. Edwin James.

Edósmia Nutt., from California and Oregon.

Neurophyllum, from the United States.

Euryptera Nutt., from California.

Leptolænia Nutt., from Oregon and California.

Eurytænia, a plant from Texas. (An objectionable name, from its similarity of sound to *Euryptera*.)

Glycósma Nutt., a plant from Oregon. (Too nearly resembles *Glycósmis*, already established.)

Cynàpium Nutt., on some plants from Oregon.

Musénium Nutt., on some plants of the Upper Missouri, Oregon, &c.

Apiástrum Nutt., on some Oregon and Californian plants.

Déweya, (dedicated to Prof. Dewey, now of Rochester, N. Y.) on a Californian plant.

[In the absence of some of our London periodicals, we are again indebted to the *Gardener's Magazine* for part of the following notices.]

DICOTYLEDONOUS, POLYPETALOUS, PLANTS.

Philadelphicææ.

DEUTZIA

corymbósa R. Br. The corymb-flowering *Deutzia*. A hardy shrub, covered with a profusion of white flowers in loose corymbs. Growing four to five feet high; a native of Nepal. *Bot. Reg.*, 1840, 5.

We have heretofore noticed the beauty of the *D. scàbra*, which flowered finely the past spring, in the nursery of Messrs. Winship. The *D. corymbósa* is a more beautiful species, equally hardy, and the white flowers, lemon scented, in loose corymbs. It was introduced into Germany by Dr. Van Siebold, and from thence into England by H. Lowe & Co. (*Bot. Reg.*, Jan.)

Cacticææ.

CEREUS

Martianus Zucc. Dr. Von Martius's *Cereus*. A green-house species, with pink flowers, appearing in April. A native of Mexico; introduced in 1838. *Bot. Mag.*, 3768.

Nearly allied to *C. flagellifórmis*, but with a somewhat erect stem. The flowers are long, tube-shaped and pink. It flowers abundantly in the summer months. (*Bot. Mag.*, Dec.)

Onográcææ.

Fúchsia fúlgens globósa.—A hybrid between *F. globósa* and *fúlgens*; the former fertilized with the latter. It is intermediate between the two; an exceedingly free bloomer, with a stiff, good foliage. (*Bot. Reg.*, Jan.)

Pittosporicææ.

SOLLYA

linearis Lindl. Narrow-leaved *Sollya*. A green-house plant, growing five feet high; with blue flowers; a native of Swan river; introduced in 1839. *Bot. Reg.*

The *S. heterophylla*, though not a commonly cultivated plant, is tolerably well known; the present subject is larger and

finer, and more slender looking, and the flowers are of an intense blue and of large size. It was found in the Swan river colony by Mr. Drummond and others, and first introduced to England by R. Mangles, Esq. (*Bot. Reg.*, Jan.)

Balsaminidææ.

IMPATIENS

tricornis Lindl. Three horned Balsamin. An annual species, with yellow flowers; appearing in July and August; introduced in 1839, from India. *Bot. Reg.*, 1840, 9.

A very beautiful yellow species, from India; an annual, and well worthy of introduction. (*Bot. Reg.*, Feb.)

It appears from a letter of Dr. Wight, lately published, that more than one hundred species occur in India, while Roxburgh has described but three; probably some of them possess much beauty. *I. picta* is a fine biennial species, raised from seeds received from Dr. Royle.

DICOTYLEDONOUS, MONOPETALOUS, PLANTS.

Lobeliidææ.

LOBELIA

ignea Hal. Fiery Lobelia. A hot-house perennial species; growing four feet high; with scarlet flowers; appearing in August and September. It is a native of Mexico; and introduced in 1836. *Pax. Mag. Bot.*, Vol. VI., p. 247.

A very showy species, lately received from M. Makoy, of Liege. It delights in warm atmosphere, and is suited to the stove, where its scarlet blossoms make a great display. It is propagated by cuttings taken from shoots which have not flowered, or from suckers from the roots. (*Pax. Mag. Bot.*, Dec.)

Rubidææ.

BOUVARDIA

splendens Graham Splendid Bouvardia. A green-house plant; growing two feet high; with scarlet flowers, appearing all summer. A native of Mexico. *Bot. Mag.*, 3781.

"Nearly allied to *B. triphylla*, but of freer growth, and much more splendid flowers." The leaves are more scabrous, larger, and more acuminate. It is difficult of propagation by cuttings, but increases readily by slips from the roots, less than half an inch long, and covered so as to leave the upper end exposed and level with the surface. (*Bot. Mag.*, Feb.)

B. triphylla is now finely in flower; it is a beautiful ornament of the flower border in summer, where it grows vigorously, attaining the height of two feet or more. *B. splendens* will prove a valuable acquisition.

Apocynidææ.

MANDEVILLA Lindl. (In honor of H. J. Mandeville, Esq., Her Britannic Majesty's Minister at Buenos Ayres, to whom we are indebted for the introduction of this and many other interesting plants.)

guianensis Lindl. Sweet-scented Mandevilla. A climbing green-house plant; with white flowers, appearing from June to August. A native of Buenos Ayres. Introduced in 1837. *Bot. Reg.*, 1840, 7.

A beautiful climbing plant, common in Buenos Ayres, where it is known as the Chile jasmine: it is found growing in al-

most every garden, where it perfumes the air with its "most deliciously sweet" fragrance. It grows freely, and should not be pruned too much, as it bears its flowers, like many other vines, upon the wood of the same year. Easily propagated by cuttings. *Bot. Reg.*, Feb.)

Cobæaceæ.

COBÆA

macrostemma Hook. Large stemmed Cobæa. A climbing plant, growing twenty feet high; with yellowish-green flowers; appearing in spring and summer. A native of Guayaquil. Introduced in 1837. *Bot. Mag.*, 3780.

Raised from seeds sent home by Mr. Skinner, in the spring of 1839, and flowered in the Conservatory of the Glasgow Botanic Garden, in November of that year. It is probably as hardy as the *C. scândens*. The flowers are of a yellowish green, but the filaments of the stamens are red; both stamens and the style are very long and exserted. (*Bot. Mag.*, Feb.)

Convolvulæcæ.

Ipomœa Lèarii Paxt., is figured in *Paxton's Magazine of Botany*, and is stated to greatly resemble the beautiful *I. rubro cærulea*, (see our II., p. 342.) It is a free grower, and the cuttings root very easily. (*Pax. Mag. Bot.*, Jan.)

Verbenæcæ.

Verbena amœna Hort.—A pretty species, said to be very nearly allied to *V. teucრიoides*, but the flowers are purple, and in a much denser spike, and with numerous and very conspicuous bracteas. The leaves are pinnatifid, and the habit partly trailing, with upright flowering shoots. It is stated to be well adapted to planting out in beds. (*Pax. Mag. Bot.*, Feb.)

New Verbenas.—In the report of the Exhibition of the Pennsylvania Horticultural Society, in another page, it will be seen that Mr. Kilvington exhibited fifteen new varieties of verbenas, one of which the committee particularly notice as very fine.

Acanthæcæ.

THUNBERGIA

aurantiaca Hort. A climbing annual, with orange-colored flowers; appearing all summer; a native of the Cape of Good Hope. Introduced in 1838. *Pax. Mag. of Bot.*, VI., p. 269.

A fine species, differing from *T. alata* only in the color of its flowers, which are of a fine orange, and in their somewhat larger size. Probably equally as easy of cultivation. (*Pax. Mag. Bot.*, Jan.)

T. alata alba is yet a rare variety. We flowered it last season, and it forms a pretty contrast with the *T. alata*. The *T. aurantiaca* will be a fine addition, and the three planted together, and running up on one trellis, will form a most pleasing mixture of colors.

REVIEWS.

ART. I. *The Farmer's Gazette, and Horticultural Repository.* In monthly numbers, quarto. One dollar per annum. Specimen number. New Haven. 1840.

[THIS is the title of a new paper, proposed to be issued in New Haven, Conn., and is only a specimen number, issued in the place of a prospectus. Should there be a reasonable encouragement offered, its regular publication will be immediately commenced. At present there is no paper devoted to agriculture and horticulture exclusively, in the State of Connecticut, and we see no reason why one should not receive a liberal support. The editor appeals to the farmers of the State, and we hope they will give him a *substantial* response.

We have more particularly noticed this work at this time, in order to extract from its pages an article contributed by our correspondent and subscriber, Dr. A. S. Monson, Vice-President of the New Haven Horticultural Society, upon the canker worm. The destructive character of this insect, and its great depredations upon the apple and the elm, has lately attracted the attention of the horticultural community, as well as the public generally, to its habits, and the discovery of some method by which they may be exterminated. Various methods have been devised to destroy the insects, both in the larvæ and perfect state. To prevent the ascension of the larvæ or grub, to the tree, can be effected in various ways; but then, to most cultivators, this is always attended with too much trouble; a speedier method is desired, but whether any will be found, by which they can be more effectually kept off, is a matter of doubt.

The following article is well worth perusal, and we commend it to the attention of our readers, especially all who are interested in the destruction of the canker worm.—*Ed.*]

Remarks on the habits of the Canker Worm, and the various methods of exterminating. By Alfred S. Monson, M. D.

“These destroyers of fruit, flower and shade trees have been so often described in papers and periodicals, and their ravages so often witnessed, as to make their history a matter of considerable notoriety. I have seen some districts of country, as in some parts of New Jersey, having fine apple orchards, where their existence was unknown.

"In this section of country, the trees most commonly selected by them are the apple and the elm. Some years since, the maple was badly eaten, and occasionally, at the present time, this is the case, where no other tree more eligible presents itself. They prefer to it, however, the thorny locust, and the plum and cherry, the latter of which, this year, has been in some cases nearly denuded of its foliage. Their ravages are not at all confined, however. They will often injure the rose, the camellia japonica, and many other favorites of the garden and green-house. I have seen a larch and a peach tree eaten by them; but they seemed to be eating indigestible food.

"Most of the operations directed against the race of canker worms have consisted in protecting the body of the tree against the ascent of the female miller or bug, which has no wings, and must crawl up if it ascends at all. Did their ascent take place only for a short time, say a month, the means resorted to could easily be rendered efficient by vigilance and attention. But the difficulty is greatly increased by the fact that this vigilance is to be unceasing, from the last of the month of August to the last of April. The greatest numbers perhaps ascend in November and April; and the farmer used to believe that a protection of tar in April would save his fruit. Formerly their ascent was more confined to this month than it now seems to be.

"The patent leaden troughs, as constructed in Rhode Island and Connecticut, if properly attended to, are perhaps more effectual than any other application that has been made. If these troughs were made wider, so as to admit of the upper part being turned over farther, to prevent the ingress of rain, it might be an improvement; and perhaps some other liquid might be substituted instead of oil, that would answer the purpose more effectually. Any liquid might be liable to be blown out, and in that case would need to be replenished. The oil, when inundated by water, floats on the surface, and mostly runs off. The insects will sometimes accumulate in such numbers, in four or five days, even in the month of February, as to absorb the oil, and enable others to cross over their bodies on to the tree. The snow will sometimes cover the troughs and melt off every where but on the north side, where it will remain after a warm change has set the millers in motion, which, crawling up, find a bridge of ice on the north side, by which they reach the upper part of the tree.

"Would not a saturated solution of caustic potash be a good substitute for oil? Dissolve so much potash as to leave some

undissolved at the bottom, and fill the troughs with it. This would destroy every insect that came in contact with it, and would not freeze or congeal in cold weather. If the troughs are not constructed so as to keep out water, it will become diluted, and will need renewing; or some lumps of potash may remain to be dissolved, in case water gets into the trough. Whatever liquids are used for this purpose, vigilance will be required in a greater or less degree. The straw or sea weed, (the latter is best,) stuffed between the troughs and the trees, is often blown across the edges of the troughs, forming a passage, unless removed, rendering the protection incomplete. That however, with moderate attention, these troughs will destroy so many of the main body of canker worms that ascend in April, and of the large numbers that ascend in all the mild weather of the winter months, as to save most of the fruit of the trees, I have experience to prove, in an experiment made with them upon twelve apple trees, during the past season. The expense of these troughs, being about one dollar for a tree of common size, and the trouble of attending on them, are the greatest objections to them.

"The New England Farmer gives a description of a frame, to be made about the tree, on which to affix tar, &c. &c.

"A very good method of extermination, when the worms get possession of the tree, and get size and weight enough to string off before they eat much, is to jar them off with a blow on the limbs, and strike them on to the ground, and place a pile of ashes around the tree, which they will in vain try to ascend, and will form a body encircling the ashes, and are easily scalded. This process, repeated three days in succession, will save the fruit.

"A number of years ago, I saw tried a double row of chestnut burs, strung around the body of a tree. It presented a troublesome obstruction to the ascent of the insect, although it was not a perfect protection to the tree. A practical gentleman of my acquaintance, and a good farmer, thought the idea originated with him, and was so confident of its success in preventing the ascent of the insects, that he offered for a stipulated sum to protect all our shade trees by this means. If used, the burs should be gathered soon after they drop.

"It appears to me that if any other means are likely to prove extensively beneficial in lessening the injury of trees from these insects, it will consist in preventing their rising out of the ground at all. The progress of the canker worm to and from the ground, are two of its most interesting periods of existence to cultivators and gardeners, in reference to means available for their destruction.

"These insects sometimes become nearly extinct, apparently in consequence of their being so numerous as to devour all accessible to them before they obtain their maturity. They will probably travel about one eighth of a mile a day, if they find no food, but will often eat unsuitable food rather than go so far. In either case, when thus badly nourished, numbers of them die, as is the case with the silk worm under similar keeping. They are enfeebled, and never become oviparous. In their progress to the chrysalis state, a day or two before they wind up, they become more inactive, cease eating, and descend by their web to the ground. They then gradually excavate a hollow spot in the ground, and by writhing and turning they gradually worm themselves into the ground, the body gradually shortening, and by the time they arrive at the end of their journey, they become quiescent in the chrysalis state—the miller with a shell around it, formed from the outer coat of the worm. The distance it gets into the ground varies according to the agility of the worm and the hardness of the soil it penetrates—generally from two to four inches. In this condition any one may find them, during the summer season, under trees which were infested, by scraping with a hoe, or digging. Many small holes will be noticed, ending where the chrysalis lays, which, on being lacerated by the hoe, have the same color and appearance with the canker worm itself. When the insect leaves this condition it has great powers of endurance, surviving a temperature many degrees below cypher, and is otherwise rather tough to kill, compared to the worm itself. Yet it appears to be an insect of too feeble powers to force its way through solid ground, as it emerges from its dormant state; neither is it probable it could ever gain its ascent through the earth in any other manner, but through the perforation by which it descended. I have additional reasons for this opinion, from the fact that several trees on my own premises, the surface of the earth around which was covered with dirt and rubbish, placed there during the summer, after the worms descended were not infested at all with worms, until they came from neighboring trees.

"I have seen an orchard sowed with rye, adjoining another orchard that had not been ploughed that season. The foliage of the former was not perceptibly injured by worms, whereas that of the latter was seared and entirely consumed by them. Were the ground ploughed, and the surface under the trees rolled, or a surface of half a foot of earth added without ploughing and rolled hard, it would probably effect much in preventing their ascent—especially if the soil is one that will roll hard;

if not, its interstices may be filled by pouring over it a thin mixture of four parts sand, and one of water-lime with water. This plan will answer for a few choice trees in a garden, if not for an orchard. In orchards, ploughing in the last part of summer will be the most advantageous plan, on a large scale, that can be resorted to—not operating on the principle on which it is sometimes supposed, by exposing the insect to the winter; for they are so constituted as to be able to endure the severest cold of our winters. It operates by changing their position, and cutting off their ascent by the opening made in their descent. The ground should be rolled after ploughing; but if it is not rolled, the settling caused by its own weight, and by rain, would undoubtedly obstruct the egress of great numbers. In gardens, it would be worth while to dig over and cover over with about half a foot of other soil, or soil from beyond the area of the shade of the tree, and roll it hard.

“I shall end this hurried communication, by noticing one other way in which trees may be protected tolerably well and cheaply, with water-lime—a mode I have resorted to, by way of experiment for peach trees, with a somewhat similar object in view, and find it answers my expectations. Place a bed of sand about the tree, on the ground, and in it lay some water-lime mortar, and hollow out with a trowel or stick a gutter, and when it gets seasoned hard, fill with potash water or oil. Leave a space filled with sand of four or five inches betwixt the inside of the circular trough and the tree, beneath which spread previously a little cement in sand, to prevent any insects ascending between the trough and the tree.”

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Grafting the lilac on the ash.—This season I grafted the different species of lilac upon the common ash, in accordance with some information I received from a friend, (Mr. Wolff, Jr.) while I lived in Paris. [See some account of this in our V., p. 446.—*Ed.*] I do not recollect to have seen any account of any one having tried the same in this country. We had grafted here about three dozen ashes, varying from four feet to ten feet in height, with the common and Persian

lilac; and I am happy to say, that the result has exceeded my most sanguine expectations; for we have now growing about twenty fine, healthy plants, with branches from one foot to eighteen inches long, which I hope, in another year, to see covered with bloom. They were grafted in April, after the lilacs had made considerable shoots. I would therefore advise that the scions be taken off in January or February, in order to retard their vegetating too soon for the stocks. Would not the pendulous ash form a beautiful object, by having its branches grafted with Persian lilac? (*Gard. Mag.*)

The peach and the nectarine the same species.—"Dec. 1, 1835, planted twenty stones of peaches, which had been kept in sand since August last. Sept. 1839—these stones came up the following summer: one of the trees bore fruit in 1838, and proved to be a nectarine, (free stone) of excellent quality; proving the correctness of your opinion, that the peach and nectarine are essentially the same species." Query? As far as this goes, is it not evidence that the smooth skinned peach, or nectarine, is the more original? (*Gard. Mag.*)

Superiority of Mr. Hoare's system of pruning the vine.—Three years since, I transplanted a vine of several years' growth, preserving the roots as long and uninjured as possible, against the wall of a barn in a southern aspect. The ground was previously trenched to the depth of two feet, the bottom being dry and the soil calcareous. The vine was managed according to the plan recommended by Mr. Hoare; two shoots being left last autumn for leaves, and two cut down for new wood. This spring the two shoots, each having twelve buds, with the buds on the stocks, and one or two pushed from the old stem, produced one hundred and fifty-two bunches, most of them very large. Six other vines, managed on the same plan, were full of promise, and no instance of failure occurred. This success, coupled with the simplicity of Mr. Hoare's system of pruning, strongly recommends it for adoption. If generally followed, grapes would be as common in England as gooseberries and currants: would that we were equally sure in ripening them!—*Id.* [It will be recollected by those who have read Mr. Hoare's treatise, that his experiments were made upon the foreign grape, so called; the Isabella and Catawba, the grapes most commonly grown with us, as well as all American grapes, will not bear such severe pruning as may be applied to foreign grapes. They are much more vigorous in their growth, and short pruning would throw the vines into the production of wood rather than fruit: gardeners err in this, and much of the fault which has been laid to the soil, situation, &c., is to be attributed to the want of a knowledge of a judicious method of pruning.—*Ed.*]

Italian method of eating strawberries.—The *Kilmarnock Journal* says, that those who have eaten strawberries served in the following manner, will never eat them in any other way. It is the Italian method of dressing them. Place as many berries as will form one layer at the bottom of a dish; sift some fine loaf sugar over them; then place another layer, and sift again. When there are five or six layers, cut a fresh lemon, and squeeze all over them. Before helping, let them be gently disturbed, that they may have the benefit of the lemon juice and sugar. (*Newspaper.*)

Superfætation in hybridization.—Dr. Lindley, in his *Theory of Horticulture*, has an excellent chapter on hybridization. Mr. Knight believed in vegetable superfætation by hybridization; other writers, also, adopted Mr. Knight's conclusions, which were drawn from experiments on the garden pea. Although his views have not been positive—

ly proved, still many able physiologists doubt the doctrine. Dr. Lindley, however, lends his name in its favor, as will be seen by the following:—

“We cannot reasonably doubt that a process so simple as that of dusting the stigma of one plant with the pollen of another, which must be continually happening in our gardens, either through the agency of insects, or the currents in the air, and which, where it takes place between two varieties allied to each other, must necessarily produce a cross; we cannot suppose, I say, that this occurs in our crowded gardens and orchards at that time only when we perform it artificially. The operation itself, although so simple, consisting in nothing more than applying the pollen of one plant to the stigma of another, nevertheless requires to be guarded by some precautions. In the first place, it is requisite that the flower whose stigma is to be fertilized, should be deprived of its own anthers before they burst, otherwise the stigma will be self impregnated, and although superfecundation is not, by any means, impossible, yet it is not very likely to occur.” (*Gard. Mag.*)

ART. II. Foreign Notices.

ENGLAND.

Cultivation of the Alpine Strawberry in pots.—I sow the seeds in boxes, about the middle of February, in a light, sandy soil,* and place the box upon a flat hot water pipe, in a vinery where it is not too hot, taking care to sow the seed very thin, and to cover it very slightly. The seed should be saved the year previous to sowing. I always save my own seed from some of the largest and earliest fruit, as there is much difference in the shape and size of this kind of strawberry. The soil I use is a mixture of loam, leaf mould, cucumber soil, and white sand, well incorporated together. The plants must be pricked out into boxes, and, when large enough, potted into small pots, well drained; and they must be shifted, as they require it, till they are potted in 24 and 16 sized pots, [No. 4 and 5.] They will require to be smoked frequently, to destroy the aphides. They are best grown under glass, either in frames or in a vinery, where they can have plenty of air and light. In July they will require to be placed in a shady place out in the open air: the pots had better be placed on boards, slates, or something of that sort, to prevent the roots from getting through; and occasionally watered with dung water. I always cut off the runners, and likewise the flower-stems, till about August; and I find that the fruit is much improved by thinning out a portion of the blooms and stems; and, by attending to this point, there may be good fruit from September to January. I place, in Au-

* It will be perhaps recollected, that this is precisely the same course we followed in the production of the new seedling we have described in another page. The use of sandy soil is particularly noted.—*Ed.*

gust and September, a portion of the plants upon a peach-house shelf, where they have always plenty of air and sun, and are sheltered from heavy showers of rain. I keep the plants upon shelves, by the front sashes of a fig-house, for the late crops. In 1837, by this method I had Alpine strawberries, and particularly fine, until Christmas; and at that season of the year they are a great acquisition at a dinner party. I gathered a very nice dish on the 31st of December, 1839, and have plants in fruit and blossom at this time, Jan. 10, 1840.

To raise these in the open ground, the plants are turned out of the pots, with the ball of roots entire, and planted in rows of well dug and rich soil, making a trench to receive the plants. The runners and flower stems must be taken off till the fruit is wanted. Treated in this manner, the plants bear from August to October. The plants should be liberally watered in dry weather.—*J. Seymour, in Gard. Mag.*

Seymour's superb white Celery.—A variety, under this name, has been grown in England, by a few cultivators, for eight or ten years; but has never found its way into the seedsman's hands, until 1839. Mr. Seymour, the author of the Seymour system of training peach trees, first raised the variety in 1830; and it is so shy in producing seed, that it has only been cultivated by a few persons to whom the seed was presented. It grows to a great size, some of the heads weighing as much as thirteen pounds after the soil and decayed leaves were taken off, and of the height of five feet. Mr. Seymour, the younger, has cultivated it to such a state, that the heads of a whole row, seventy-five feet long, averaged nine and ten pounds each, after the soil and outside leaves had been taken off. Five and six pounds is the weight by ordinary cultivation. Now that the seeds have got into the trade, we hope it will be introduced.—*Ed.*

ART. III. Domestic Notices.

Wistaria Consequana.—No vine is so common here as the *Wistaria*; you may find it over a hundred doors in our rural city, and it grows, when once firmly rooted, with great vigor. I will endeavor to collect some statistics about it, and send them to you, as it seems to be a rare plant with you from the mode in which it is spoken of in the Magazine. I now remember Mr. Pickering Dodge, of Salem, was much struck with it, when here two or three years ago, and made many inquiries about it: the beautiful blue flowers were just then expanding. Mr. Hogg showed me the original plant he imported some years since, and from which he furnished Mr. Cushing, and spoke of it as rare. You say, in one of your recent numbers, that it will, probably, winter well: I need not state that none of the multitudes which grow here are ever protected—it is as hardy as an oak.—*B. Silliman, Jr., New Haven, Conn., July, 1840.*

[Is not our correspondent mistaken in the plant? And is not the *Wistaria*, with the beautiful blue flowers, the *W. frutescens*, an American species, somewhat resembling the *W. Consequana*, and thought by some to be even more beautiful? The *W. frutescens*,

though not by any means common around Boston, has been cultivated in some of the nurseries for several years, but it has not been introduced to gardens. The flowers of *W. Consequana* are not blue, but of a bluish lilac, while those of the *W. frutescens* approach to a pale blue: the cluster of blossoms of the *frutescens* is not so long nor as large as the *Consequana*. The many plants grown in New Haven may be the latter species, though we think they are not. *W. Consequana*, but a few years since, was considered rare in England, and also difficult of propagation, which rendered it for a long time a dear plant. We shall be glad to receive all the statistics our correspondent can procure, relative to the introduction and cultivation of the species in New Haven. They will at once clear up a doubt about the true species.—*Ed.*

Mr. Donald has given up the management of the Public Garden, and the establishment, until another gardener is procured, is under the direction of our correspondent, *Mr. Teschemacher*. The garden is in very good condition. A band of music performs on Saturday evenings, and the number of visitors, on these occasions, is very large.—*Ed.*

Solanum sp.—I procured, from *Mr. Hogg*, New York, a short time since, a new *Solanum* sp. of climbing habit and quite delicate flowers. Have you seen it?—*B. Silliman, Jr.*, *New Haven, Conn.*, *July*, 1840. [In our Vol. II., p. 223, a *Solanum* is noticed under the name of *S. crispum*, and it is stated to make as handsome a show as *Wistaria Consequana*, if trained to a wall, the flowers being of a purplish blue, in large corymbs. Perhaps the plant mentioned by our correspondent is the same. A species is also noticed in our Vol. V., p. 353, in the Report of the Pennsylvania Horticultural Society, as the *S. jasminoides*. It was exhibited by *Mr. Buist*, but no remark is made respecting the habit of the plant.—*Ed.*]

Verbena fulgens.—My verbenas are doing finely: *V. fulgens* is far the most splendid color I have ever seen in any flower of any genus, except *Cæreus*.—*Id.*

Dennis's patent (!) troughs for destroying canker worms.—We are glad to see that the attention of the public has been called to the patent invention of a *Mr. Dennis*, of Rhode Island; in which he claims to have originated the circular troughs for destroying the canker worm grub.

We have been astonished to think that the commissioners of the patent office should give a patent for such a simple contrivance as the circular troughs. And this *Mr. Dennis*, in applying for a patent for his circular troughs, has, in our opinion, placed himself in a laughable position before the public. But he has no claims whatever to a patent: the idea of circular troughs did not originate (what an inventive idea!) with him; at least six years previous to his discovery, these circular troughs were recommended by several correspondents of the *New England Farmer*, and were probably not put in use on account of the cost of making them. We cannot well imagine a more illiberal spirit than that manifested by *Mr. Dennis*, in first adopting a plan recommended by others; and, second, applying for a patent, with the hope that, by the "provisions of the instrument," he would intimidate many honest farmers from making good use of the discovery, in destroying the canker worm grub, without paying him or his authorized agents a good sum for the use of his patent right!

We do not know yet how completely effectual these circular troughs

have proved; as some have stated that they were useless, while others affirm their certainty in the destruction of the grub; we have no doubt that, properly applied to the tree, and kept filled with oil or some other substance, they will effect a good purpose; and we would recommend every farmer to make his own circular trough, and apply them to his trees, notwithstanding the "14th section of the law of 1836," which makes it an offence for which a fine may be exacted. Had we occasion to use them, we would run the risk of any trouble to be apprehended from prosecution. We will here state, for the information of those who wish to use them, how they were manufactured by Mr. P. G. Robbins, of Roxbury, one of the first who invented the plan, as long ago as 1830:—Cut a sheet of lead four and a half inches wide, and of sufficient length; form it on the handle of a pitchfork* like a tube, then pass a rope through it, and bend it round the tree till the ends meet; let them lap two inches and be hammered together, and by the aid of putty or paint made water tight; then fill in the cavity between the tree and the troughs with sea weed, or, if not to be easily procured, with straw; fill the trough, the latter part of September, with winter strained oil, or some other liquid, and the grubs cannot ascend the tree.

Our object, at this time, is only to notice the claim of the invention of Mr. Dennis. He has no claim at all; and we hope that every person who wishes to put the circular trough around his tree, will not be deterred from doing so by the "14th section of the law of 1836."—*Ed.*

Budding roses in June.—Mr. T. Lee informs us that he has roses now (July 10,) finely in bloom, which were budded in June. Good buds are inserted in strong stocks of the Boursalt, Four Seasons, &c., and the stock being hardy, the bud immediately shoots forth, and in five weeks produces flowers; at least such has been the case under the successful treatment of Mr. Lee, who has been the first to practise budding at that early season.—*Ed.*

The Franconia raspberry.—One of the most valuable fruits which has been introduced of late years, is the Franconia raspberry; and although it was first imported by S. G. Perkins, Esq., some years ago, yet it is not often found, except in the most choice collections. We intend, at a future time, to give some history of the variety, its introduction, cultivation, &c., but, in the mean time, every person who has it not already in his garden, should procure it without delay, if he is a lover of handsome fruit. It is the most productive variety known, and the fruit is so showy, large and rich, that it always commands a good price.—*Id.*

ART. IV. *Pennsylvania Horticultural Society.*

May 19, 1840.—The stated meeting of the Society was held at its Hall this evening, the President in the chair. [The report of the monthly meeting in April, has never been received.—*Ed.*]

The following report was submitted by the Committee on Plants and Flowers:—

* A pitchfork is scarcely large enough: a round stick, four inches in diameter, would do better.—*Ed.*

"The Committee on Plants and Flowers report, that at the Society's intermediate meeting of the 2d inst., there were exhibited, (in accordance with part only of the premium list,) six pots of auriculas, and six pots of polyanthus. Your Committee regret, however, that their characters were so deficient, that they could not in justice award premiums to either of them, yet they cannot pass over in silence the auriculas, exhibited by Robert Kilvington, some of which were very pretty. Mr. K. also presented to the notice of the Committee, fifteen new seedling verbenas, one of which was particularly fine, purple, and distinct of its kind, though not yet named."

The Committee on Vegetables reported—that at the same intermediate meeting, they awarded the premiums as follows, viz: For the best flag, or broad leeks, to William Chalmers, Sr. For the best spinach, to Andrew Patton, gardener to Mrs. Kohne. For the best asparagus, to Robert Kilvington; and for the best mushrooms, to Robert Kilvington.

The Committee noticed with pleasure the introduction of an indigenous vegetable, the Morel, (*Morchella esculenta*), for the first time, by Robert Kilvington; for which they awarded an honorary premium of Two Dollars.

Exhibited. Plants and Flowers:—By Robert Kilvington, auriculas, in pots, and a variety of cut flowers of seedling verbenas. By Hirst & Dreer, polyanthus in pots. By Alexander Parker, cut flowers of single and double tulips.

Vegetables:—By Robert Kilvington, asparagus, indigenous morel, and mushrooms. By Andrew Patton, spinach and leeks; and leeks, by William Chalmers, Sr., William Graham, and P. Flemming.

To competitors, this evening, the following awards have been made:—

By the Committee on Plants and Flowers:—For the best ten varieties of Chinese sweet scented roses, no premium was awarded, as none of the roses were named, and the committee had doubts. For the best American seedling Chinese rose, to John Sherwood. This fine rose was propagated in nine weeks from the time of planting the seed. For the most interesting collection of plants in pots, to Robert Buist. For the second best collection, to Joseph Cook. For the third best collection, to Andrew Dryburgh. For the best bouquet to Andrew Dryburgh; and for the second best, to Alexander Parker.

The attention of the committee was specially attracted by the exhibition of some beautiful cut flowers of the ranunculus, by Robert Buist; they were, however, too early for the premium.

The display of plants, on this occasion, was worthy of particular notice.

By the Committee on Vegetables:—For the best forced cauliflowers, to George Robinson, gardener to H. Binney. For the best forced potatoes, to James McKee, gardener to C. Chauncey. For the best peas, grown in New Jersey, to Adam Price, Burlington. For the best sallad, grown in the open ground, to George Robinson, gardener of H. Binney. For the best blanched rhubarb, to James McKee, gardener of Charles Chauncey.

Ordered, that an honorary premium of Two Dollars be given to G. G. Hatch, of Camden, N. J., for having exhibited marketable peas on the 5th of May.

A communication, by Robert Buist, on the culture of the ranunculus, was read, and ordered to be inserted on the Minutes; and, as this subject is one of interest, it is here given.

“Remarks on the cultivation of the Ranunculus.—It has been admitted that the ranunculus excels every flower in symmetry of shape, as well as in the brilliancy and variety of its coloring; nature, even in its gayest mood, does not present a more attractive object than a bed of these beautiful flowers; unfortunately, their culture has been considered impracticable in this vicinity, and, even with the greatest attention and continual care, there has rarely been a solitary specimen presented before the Society. The attention and culture bestowed on the specimens now before this meeting, have differed very far from that of previous practice. In October, 1839, they were planted in a stiff, loamy soil, mixed with a small portion of leaf mould, the tubers were placed in drills, about three inches, and eight inches between the drills, the crown of the roots were then covered two inches deep with the same soil. About the first of December the bed was covered with two inches of decayed tanner's bark, which was taken off about the first of March. Thus, with no other care bestowed, except weeding,) have the specimens now exhibited been produced. My fellow members will perceive from the above, that there is nothing difficult or ambiguous in their culture—its chief merit is its actual simplicity. If these remarks tend to throw even a ray of light on the cultivation of this rich and gay tribe, it will meet the whole object of the writer;—which is respectfully submitted.—*Robert Buist.*”

A communication from Mr. J. Hufnagle, accompanying two boxes of Calcutta flower seeds, as a present to the Society, from Dr. C. Hufnagle, his son, was read, and a vote of the thanks of the Society ordered to the donor, and the seeds referred to the appropriate committee.

Members elected.—Valentine Glenat, George Gale, Dr. Hudson S. Burr, Richard R. Robb, Henry E. Montgomery, George Campbell, Charles A. Poulson, Edward W. Robinson, and John G. Reading.

Exhibited. Plants:—By Robert Buist, new plants, *Collinsia heterophylla*, *Erysimum Peroffskyanum*, *Gladiolus Colvillii*, *Lilium atrosanguinum*, *Maxillaria* sp. *Mesembryanthemum glabrum*, *M. tricolor*, *Pentstemon speciosus*, and *Rhodanthe Manglessii*, *Alstroemeria pulchella*, *A. tricolor*, *Amaryllides*, twelve kinds, *Calceolarie*, *Clématidis Sieboldii*, *Gloxinia speciosa*, *Fxia longiflora*, *I. rubro-cyanea*, *Isdra coccinea*, *Ornithogalum aureum*, *Senecio* sp., *Verbena*, and *Pelargonium* in variety, viz. *Alarm*, *Alexandrina*, *Alicia*, *Beauty of Ware*, *Blandina*, *multiflora*, *Cassius*, *Climax*, *Discount*, *Elegantissima*, *Emperor of the West*, *Florence*, *Gem*, *Isedorianum*, *King of Hanover*, *Lady Dillon*, *Prima Donna*, and *Unas*. Cut pansies, twelve sorts, and twenty-one varieties of cut ranunculus.

By Joseph Cook, *Asclepias aurea*, *Epiphyllum Ackermansii*, *E. Jenkinsii*, a large specimen in profuse bloom, bearing upwards of one hundred flowers. *Hydrangea hortensis*, and *pelargonium*, in great variety, viz. *Adelina*, *Admiral Napier*, *Albidum*, *Americanum*, *Amabile majus*, *Beauty of Philadelphia*, *Belvidere*, *Brightoniensis*, *Captain Cook*, *Cato*, *Cecilia*, *Celeste*, *De Vere*, *Diversum*, *Hector*, *Hericiatum*, *Hero*, *Lady Fitzharris*, *Lady Madison*, *Lord Denman*, *Lord Tarborough*, *Lucifer*, *Magniflora Dennis's*, *Maria*, *Mentor*, *Micans*, *Moreana*, *Negro Boy*, *Perfection Dennis's*, *Purple Perfection*, *Queen of Scots*, *Rose Perfection*, *Rosalind*, *Rosinante*, *Speculum mundi*, *Splendens*, *Superbissima*, *Triumphant*, *Wheeler's*, *Yeatmanianum majus*, and *Tricolor* engrafted upon *Roena superba*.

By Andrew Dryburgh, *Ardisia crenulata*, *Calceolaria*, *Dracæna terminalis*, *Epiphyllum Ackermansii*, and *E. speciosum*, *Euphorbia splen-*

dens, *Gesneria bulbosa*, *G. rutila*, *Ixora*, *crocata*, *Pelargonium*, *Rosa*, *Strelitzia reginae*, *Verhena Tweediana*, *V. Kilvingtoni*, and a bouquet. By Alexander Parker, aloes, *Cacti*, *Magnolia fuscata*, *Mesembryanthema*, and a bouquet. By Ritchie & Dick, *Anaryllides*, four specimens, *Epiphyllum Ackermanni*, *Gardenia*, and *Pelargonium*. By William Chalmers, Sr., *Eutoca viridis*, *Maddia elegans*, and cut flowers of fine seedling pansies. By John Sherwood, several pots of fine seedling roses. By Charles Conover, a basket bouquet.

Vegetables:—By George Robinson, gardener to H. Binney, forced cauliflowers, six heads, forced potatoes of the kidney, forty fold, and Hancock's seedling varieties, peas, lettuce, cucumbers, cabbage, asparagus, beet, and rhubarb. By James McKee, gardener to Charles Chauncey, forced cauliflowers, forced potatoes, kidney and forty fold, peas, rhubarb, spinach, cucumbers, lettuce, and asparagus. By Joseph Cook, twenty-four cucumbers, Waker's Rambler, and Royal George varieties, the combined length of which was thirty-five feet ten inches. By Charles Conover, lettuce and asparagus. By William Chalmers, Sen., very fine peas, grown in Pennsylvania. By Adam Price, peas. By R. M. Rhees, Camden, N. J., peas.

Fruits:—By George Robinson; large oranges and lemons. By Charles Conover, strawberries.

June 16th, 1840.—The stated meeting of the Society was held at its hall, this evening, the President in the chair.

The Committee on Vegetables reported, that, at the intermediate meeting, held May, 30th, they had decided that the premium for the best cabbage was due to Gregory Lee, gardener to Dr. William Wetherill. For the best turnips grown in New Jersey, to G. G. Hatch; and for the best peas, grown in Pennsylvania, to Andrew Patton, gardener to Mrs. Kohne.

The Committee on Fruits reported, that, at the same intermediate meeting, they had granted the premium for the best strawberries, (Keen's seedling,) to William Graham, gardener at the Almshouse. They had also awarded an honorary premium of two dollars, for fine strawberries, of the Hudson variety, to Charles Conover, gardener to I. C. Jones.

For this evening's competition, the Committee on Plants and Flowers reported, that they had awarded the premium for the best double rocket larkspurs, to Hirst & Dreer. For the best pinks, to William Hobson, Kingsessing. For the best bouquet exhibited, to Joseph Cook, gardener to William Norris; and for the second best, to Robert Kilvington; and honorary premiums of one dollar each, to Charles Conover and Joseph Cook, for bouquets. For the most interesting collection of plants, exhibited in pots, to Robert Buist; and for the next, to Alexander Parker. And that they, with much pleasure, noticed a fine specimen of *Tecoma jasminoides*, exhibited by William Sinton, gardener to Gen. R. Patterson; also, fine specimens of seedling carnations, by Robert Kilvington.

The Committee on Fruits awarded the premium for the best cherries, to Jacob Engleman; and for the best display of fruit, to Andrew Patton.

The Committee on Vegetables reported their award of premiums to be—for the best lettuce, grown in Pennsylvania, in the open ground, to George Esher, Ridge Road, of the white Cos variety. For the best carrots, grown in New Jersey, to George Robinson, gardener to H. Binney. For the best cauliflowers, grown in New Jersey, in the open ground, to the same contributor. For the best

beans, grown in New Jersey, to Adam Price. For the best beets, to Andrew Patton, gardener to Mrs. Kohne. For the best artichokes, to Philip Reilly, gardener to Miss Gratz. For the best potatoes, grown in Pennsylvania, to George Esher; and, for the most interesting display of vegetables, to Jacob Engleman.

The Treasurer submitted his quarterly report, which was referred to the Committee of Finance.

Ordered, That an honorary premium of two dollars be given to Charles Conover, for a beautiful basket bouquet, exhibited at the last stated meeting, which, owing to the crowded state of the hall, was unintentionally overlooked.

Ordered, That the amendment to the report of the Committee on Plants and Flowers, at the last stated meeting, awarding the premium to Andrew Dryburgh, for ten varieties of Chinese sweet scented roses, be reconsidered: whereupon the proposed amendment was lost, and the report of the committee, awarding *no* premium, confirmed.

This being the evening for the competition of ranunculi, and as no specimens were brought forward, it was therefore

Ordered, That an honorary premium of five dollars be given to Robert Buist, for his fine specimens displayed at the last stated meeting.

A communication from Mr. John McArann, was read, covering another addressed to himself, from the Hon. J. K. Paulding, Secretary United States' Navy, purporting that some boxes of seeds, &c. from the Exploring Expedition, had been ordered to him for advantageous distribution; which he in the kindest manner presented to the Society.

Ordered, That the thanks of the Society be presented to Mr. John McArann, for the above packages of seeds, &c.; and the seeds be referred to the appropriate committee.

Presented to the Society.—Four parts of the Library of Entertaining Knowledge, on Vegetable Substances—by Robert Kilvington.

Members elected.—Alexander Lardner, F. D. Sherman, Isaac C. Jones, Jr., John U. Fraley, Jr., Joshua Pancoast, John P. Brock, and Peter Rabbe.

The following were exhibited at the intermediate meeting of May 30th. Flowers:—By William Chalmers, Sr., some superior double rocket larkspurs, and flowers of a very pretty iris.

Fruit:—Strawberries, by William Graham, Charles Conover, and Andrew Patton.

Vegetables:—By Gregory Lee, early York cabbage, and potatoes, early Devizes, imported last fall, and planted in the open garden in March last; and cabbage, by Andrew Patton and Peter Flemming.

Exhibited. Plants:—By Robert Buist, for the first time before the Society, *Gesneria magnifica*, *Gloxinia violacea*, *Diplacus puniceus*, *Erica cerinthoides superba*, and *E. Bôwiei*, *Calceolaria angustifolia*, *Cereus speciosissimus*, *Dionæa muscipula*, *Erica cinerea*, *E. ruhens*, *Fuchsia coccinea*, *F. globosa*, *Gardenia multiflora*, *Gladolus bländus*, *Gloxinia candida*, *G. speciosa*, *Ixora coccinea*, *Leche-naultia formosa*, *Menziesia cœrulea*, *Verbena Powellii*, *V. speciosa*, *Pelargonium*, viz. Smith's prize Scarlet, *Siddonia*, and Queen, and a bouquet of dahlias.

By William Sinton, cut specimens of *Tecomma jasminoides*, a plant of recent introduction. By Peter Mackenzie, carnations, fifteen varieties; pinks, six varieties; *Phlox Drummondii*, eight varieties; and

nine of verbenas. By Robert Kilvington, seedling picotees, carnations and a bouquet. By Robert Reed, gardener to J. J. Vanderkemp, cut roses, dahlias, and double rocket larkspurs. By Hirst & Dreer, double rocket larkspurs. By Philip Reilly, larkspurs. By William Hobson, pinks; and William Chalmers, Sr. pinks; and bouquets, by Joseph Cook and Charles Conover.

Fruits:—By Jacob Engleman, cherries. By Andrew Patton, strawberries, red and white; currants, red and white. By Philip Reilly, Blackheart cherries.

Vegetables: By Jacob Engleman, potatoes of the Mercer, early white, and London pink-eyed varieties, twenty-five cucumbers, six cauliflowers, rhubarb, and beets. By William Chalmers, Sen., three very fine egg plants, and three squashes, unusual at this season, and potatoes. By George Esher, potatoes and lettuce. By George Robinson, cauliflowers, beets, carrots, cabbage, and Valentine beans.

By Gregory Lee, early kidney potatoes, early turnip beets, Windsor beans, and cauliflowers. By — Coopers, potatoes, ash-leaved kidney, &c. beets and beans. By Andrew Patton, onions, beets, cabbage, peas, and potatoes. By Robert Reed, artichokes, lettuce and beans. By Philip Reilly, artichokes and snap beans. By Adam Price, beans and beets. By Charles Conover, very fine lettuce; and by James Watt, potatoes.

Articles:—By Newberry A. Smith, specimens of leaden wire, used in England for horticultural purposes.

ART. V. *Massachusetts Horticultural Society.*

Saturday, June 27, 1840.—Exhibited. Flowers:—From S. Walker *Oenothera macrocarpa*, *Antirrhinum caryophylloides*, two colored monkshood, *Astrantia major*, *Lychnis fulgens*, pinks, fine pansies and bouquets. From A. Bowditch, a variety of bouquets. From W. Kenrick, double flowering raspberry, moss roses and bouquets. From Hovey & Co., bouquets. From Rufus Howe, bouquets. From J. A. Kenrick, yellow and scarlet monthly, variegated monthly, and Japan honeysuckles, *Caprifolium Douglâssi*, pæonies, larkspurs, roses, &c.

From Messrs. Winship, larkspurs of various sorts, spiræas, pæonies, roses, honeysuckles, passion flowers, phloxes, *Solandra grandiflora*, clematis of several sorts, honeysuckles, and a variety of other flowers and flowering shrubs. From S. R. Johnson, Chinese and hardy roses, in great variety.

Native Plants:—A great variety from Mrs. Dix; these arrived so late, as to preclude the possibility of properly arranging them in season: the following are some of the species:—*Corydalis glauca*, *Arethusa ophioglossoides*, *Polygala rubella*, *Mitchella repens*, *Houstonia longifolia*, *Dievilla canadensis*, *Kalmia angustifolia*, four species of *Lysimachia*, *asclepiases*, azaleas, *Cornus*, *hypericums*, irises, viburnums, &c.

Fruit:—From Capt. George Lee, West Cambridge, a peach tree in a pot, bearing four fine peaches; they were budded for the Early

Anne, but, although the cultivator was very certain he could not have committed an error, the fruit was so much higher colored than that variety, that it could not be believed to be the same. This system of growing peaches in pots has been fully detailed by us in our II., p. 241; and we are only astonished that amateur cultivators have not more generally adopted this plan of procuring this most delicious fruit.

From Mrs. Hubbard, from her garden at Nahant, fine specimens of strawberries, supposed to be the Methven, but not that variety. From the President, handsome specimens of black Tartarian and white Bigarreau cherries: Mr. Vose always shows very superior fruit. From J. A. Kenrick, extra large black Tartarian cherries; also, common Bigarreau cherries. From B. Guild, black Tartarian cherries. From W. Meller, seedling wood strawberries. From W. Kenrick, very superior specimens of a cherry called the Napoleon Bigarreau.

From R. Manning, ten varieties of cherries, as follows:—common white Bigarreau, mottled Bigarreau, Madison Bigarreau (seedling,) large white Bigarreau, Black Heart, Black Eagle, Elton, China Bigarreau, American Heart, and American amber cherries: the Bigarreaus were all very handsome, and Mr. Manning's seemed as handsome as either of the others. The American Heart, American Amber, and China Bigarreau are small, and second quality fruits, not to be classed with the others, and only valuable, when the object is to possess all the sorts cultivated. We expect some account of all of them, with a description of Mr. Manning's seedlings, from Mr. Manning himself.

Vegetables:—From S. Walker, very superior rhubarb, the stalks of an uncommon size. From J. T. Smith, Roxbury, early potatoes.

July 4th.—*Exhibited.* Flowers:—From S. R. Johnson, roses, and picotee pinks. From J. Hovey, bouquets. From S. Walker, pansies and bouquets. From A. Bowditch, dahlias. From P. Barnes, dahlias.

Native Flowers:—From Dr. E. Wight, Dedham, a great variety.

Fruits:—From J. G. Thurston, Lancaster, fine gooseberries, (Mr. Thurston has annually exhibited very superior specimens.) From J. S. C. Greene, Waltham, white Chasselas grapes. From C. Golderman, black Hamburg grapes. From A. D. Williams, cherries.

Vegetables:—From Jos. Lovett, 2d, Beverly, early potatoes. Mr. Lovett states that the variety, (name not given,) is a good winter as well as summer potato, and is always full grown by July 4.

July 11th.—An adjourned meeting of the Society was held this day, the President in the chair. Messrs. P. Barnes and F. L. Call, of Boston, were admitted subscription members.

Exhibited. Flowers:—From A. Carter, *Hoya carnosa*, *Gardënia radicans*, *Phlox Drummondii*, *Alstroemëria Pelegrina*, *Nymphæa odorata*, *Lilium superbum*, *Fuchsia globosa*, *Crassula coccinea*, verbenas, roses, carnations, larkspurs, dahlias, white lilies, &c. From Capt. Macondry, some fine dahlias. From J. A. Kendrick, *Lilium superbum* and *candidum*, *Asclëpias tuberosa*, *Cimicifuga fœtida*, &c. From S. R. Johnson, carnations, pinks, roses, &c. From S. Walker, fine large bouquets, and specimens of *Cimicifuga fœtida*.

From M. P. Wilder, *Oenothera ambigua*, *Spiræa lobata* and *lobata* American variety, (very beautiful,) *Coreopsis lanceolata*, *pinnata*, *verticillata* and *atropurpurea*, *Lychnis fulgens*, and *chalcédonica pleno*, *Antirrhinum caryophylloides*, *Pentstemon diffusum*, and

Walker's and Richardson's seedling larkspurs. From P. Barnes, dahlias. From Hovey & Co., bouquets.

Native Plants:—From F. L. Call and F. Parker, *Azalea vicosa*, *Lysimachia quadrifolia* and *striata*, *Spiræa alba*, *Asclépias syriaca*, *Rosa rubiginosa*, *Antirrhinum Linaria*, *Hypericum perforiatum*, *Verbascum Thapsus*, &c.

Fruits:—From John Hovey, handsome gooseberries. From Dr. Z. B. Adams, cherries. From J. L. L. F. Warren, gooseberries. From C. Golderman, Chelsea, handsome black Hamburg grapes. From W. G. Stearns, Esq., peaches and nectarines. From R. Manning, white mazard cherries.

Vegetables:—From W. G. Stearns, large and fine cucumbers.

July 18th. Exhibited. Flowers:—From T. Lee, *Lodsa aurantiaca*, *Asclépias tuberosa*, and *tuberosa pale var.*, *Bartonia aurea*, *Potentilla Hopwoodiana*, *Sabbatia chloroides*, *Dahlia repens*, *Scabiosa atropurpurea*, *Lilium canadense*, *Gaillardia aristata*, *Rosa rubifolia*, *Hibiscus sp.*, *Russelia juncea*, Double Macartney rose, &c. From W. Meller, carnations, *Lilium sp.* and bouquets. From W. Carter, phloxes, seedling delphiniums, dahlias, *Passiflora alata*, *Fuchsia globosa*, bouquets, &c. From J. Hovey, *Lilium japonicum (fine)*, verbenas, carnations, heliotrope, annuuls, and bouquets.

From P. Barnes, the following dahlias:—*Sulphurea elegans*, Quilled Perfection, Unique, and Suffolk Hero, very good bloomers. From A. Bowditch, dahlias and bouquets. From S. Walker, a very fine specimen of *Yucca filamentosa*, about five feet high; also, dahlias and bouquets. From S. R. Johnson, pinks and carnations. From Hovey & Co., bouquets.

Native Plants:—A collection from F. L. Call and F. Parker.

Fruits:—From A. D. Weld, good specimens of *Franconia raspberries*, and red and white currants. From J. Hovey, very large white currants. From W. Kenrick, gooseberries. From A. D. Williams, white and red currants. From S. Downer, Belle magnifiqu cherries. From C. Golderman, black Hamburg grapes. From J. L. L. F. Warren, a small seedling cherry.

The fourth monthly show of the Society took place this day, the exhibition being confined to carnations alone. The Show was quite limited, and inferior to last year: there were only three competitors. The following is the report of the judges for awarding the premiums:

CARNATIONS:—For the best display of flowers, to Mr.

W. Meller, the first premium of . . . \$5 00

For the second best display, to John Hovey, the second premium, of . . . \$ 00

The committee remark, that the exhibition was inferior to that of the last season, and unless by another year the specimens should be superior to the present, they would deem it advisable to withhold any premium. But they hope such will not be the case, and that the exhibition for the next year will be worthy of the members of the Society. The judges were C. M. Hovey and S. Walker.

July 25th.—The meeting was adjourned to this day, the President in the chair.

A committee of three, consisting of the President, Recording Secretary, and the Chairman of the Flower Committee was chosen to report upon the expediency of holding an annual exhibition in September, to report Saturday week, to which time the meeting was adjourned.

Messrs. C. H. Eldridge, of Brighton, and William Bacon, of Roxbury, were admitted subscription members.

Exhibited. Flowers:—From John Prince, *Lilium superbum*. From Hovey & Co., bouquets. From P. Barnes, *Denissii*, Quilled Perfection, Marquis of Lothian, and Middlesex Rival dahlias; also, a fine specimen of *Gladiolus floribundus*. From J. Hovey, carnations and bouquets. From S. Walker, bouquets. From W. Kenrick, *Nerium splendens*, bouquets of roses, &c. From S. R. Johnson, fine balsams, pinks, hollyhocks, and Noisette roses.

ART. VI. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Pot and Sweet Herbs.</i>		From	To
	\$ cts.	\$ cts.			\$ cts.	\$ cts.	
Potatoes, new:				Parsley, per half peck,.....	25	—	
Chenangoes, } per barrel,	1 50	2 00		Sage, per pound,.....	17	20	
} per bushel,	75	—		Marjorum, per bunch,.....	6	12	
Common, { per barrel, ..	1 25	1 50		Savory, per bunch,.....	6	12	
} per bushel, ..	50	62½		Spearmint, per bunch,.....	6	—	
Common (old) per bushel,	50	75					
Turnips:				<i>Fruits.</i>			
New, per bunch,.....	6	8		Apples, dessert, new :			
Ruta Baga, per bushel,...	50	62½		Common, per bushel,	1 00	1 50	
Onions:				Extra, per bushel,.....	2 00	—	
New white, per bunch,....	4	6		Dried apples, per pound, ..	7½	9	
Red, per bunch,.....	4	5		Cherries, per quart:			
Beets, per bunch,.....	6	—		Common,.....	8	10	
Carrots, per bunch,.....	6	—		Raspberries, per box:			
Radishes, per bunch:				Common,.....	25	37½	
Scarlet short-top,.....	2	3		White Antwerp,.....	25	37½	
Shallots, per pound,.....	20	—		Franconia.....	37½	50	
Garlic, per pound,.....	12½	—		Blackberries, per box,	6	8	
				Blueberries, per quart,....	8	—	
<i>Cabbages, Salads, &c.</i>				Whortleberries, per quart, ..	6	8	
Cabbages, each:				Currants, per quart:			
Early York,.....	3	6		Red Dutch,.....	6	8	
Savoy,.....	4	6		White Dutch,.....	8	10	
Lettuce, per head,.....	2	4		Black, per bushel,.....	2 50	3 00	
Rhubarb, per pound,.....	4	6		Pears:			
Peas:				Juneating, per half peck, ..	25	—	
Common, per bushel,	1 00	—		Common, per half peck, ..	25	—	
“ per half peck, ..	12	—		Peaches:			
Marrowfat, per bushel,...	1 00	1 25		Common, per half peck, ..	75	—	
“ per half peck, ..	12½	17		Extra, per dozen,.....	4 00	4 50	
Beans, (shelled) per quart:				Apricots, per quart,.....	25	37	
Cranberry.....	12	17		Grapes, per pound:			
Common,.....	10	12		Black Hamburg (forced)	1 00	—	
String, per half peck:				White Sweetwater, (do.)	75	—	
Common,.....	12	—		Cucumbers:			
Cora, per doz. ears,.....	12	—		Common, per dozen,....	10	12	
Green Walnuts, per hund....	1 50	—		Watermelons, each,.....	25	37½	
				Muskmelons, each, (forced,)	20	25	
<i>Squashes and Pumpkins.</i>				Cranberries, per quart,....	12	—	
Squashes:				Lemons, per dozen,.....	12½	20	
Bush Summer, per doz....	12	—		Oranges, per dozen :			
Crookneck, per doz.....	12	17		Sicily,.....	25	37½	
West India, per pound...	2½	8		Havana, (sweet),.....	50	—	
				Chestnuts, per bushel,.....	4 00	4 50	

REMARKS.—At the time of our last report, we were congratulating the farmer upon the unusually favorable weather and abundant products of the season; since then, there has been a great change in vegetation; at that period the weather had been warm and genial, accompanied with a due quantity of rain; but since then almost every crop has suffered from the unusual drought of six weeks' continuance, with the exception of a light shower, and many things have suffered much injury: corn and potatoes, in dry land, in some places, are almost past recovery; at the time we now write, which is of a later date in the month than the report is usually made up, (30th,) rain has begun to fall, and there is the appearance of heavy showers. We have not known so dry a season for some years.

Potatoes, from the cause just noticed, have commanded a good price the whole month; the quality has been poorer than usual; Chenangoes come to hand more freely since the rain of the 24th. Turnips continue good. Beets and carrots come in now of fair size. Radishes are about done for the present. Cabbages more plentiful; a few Savoy's have been brought in. Rhubarb about out of season. Peas are supplied in good quantity. String and shell beans, of common kinds, abundant. Corn plentiful: the first in the market last week came from New York. Tomatoes very abundant for the season; large supplies have been received from New York, but they are now brought in from the vicinity. A few green walnuts have been brought into the market. Summer squashes plentiful; and a few autumnal marrows, of good size, and well ripened, have made their appearance to-day.

In fruit there is a fair supply: apples from the south are selling at quotations. Strawberries all gone. Raspberries have been scarce. Blackberries and whortleberries abundant and fine. Currants have been unusually sweet, owing to the fine weather. Pears plentiful, mostly, however, received from New York. Forced grapes are more abundant and quality better. There are some watermelons in market, but rather inferior. Peaches from the south are received in considerable quantities; a few fine forced ones have sold as high as four dollars and a half the dozen. Cranberries most gone. Pine-apples, of good quality, are scarce; very few have arrived the past week or two. In nuts we have so little doing, that prices are wholly nominal.—*M. T., Boston, July 30, 1840.*

HORTICULTURAL MEMORANDA

FOR AUGUST.

FRUIT DEPARTMENT.

Grape vines under glass, will now begin to color their fruit: syringe frequently, and give an abundance of air in all fine weather. Be careful, and not overbear the vines; it is better to have a few bunches well colored and well flavored, than a large crop colourless and tasteless. The new wood must be carefully laid in, and all superfluous shoots taken off.

Strawberry beds may be planted out this month, if the weather is not too dry. The soil should be dug deep, and the surface well manured with well decomposed dung, and raked fine; the plants may then be transplanted. Old beds will require attention: they should be kept clear of all weeds, and all the runners that are not wanted for filling up the beds, or making new ones, should be cut off.

Raspberry beds.—Plantations of this fine fruit should not be neglected. Some cultivators cut away all the old wood as soon as the fruit is gone. As the soil becomes hard, from walking between the plants to gather the berries, the young suckers grow more freely if it is lightly forked over. The young shoots should also be tied up to stakes.

Fruit trees of various kinds, should be budded this month. Plums and cherries, in particular, should be attended to.

FLOWER DEPARTMENT.

Dahlias are still objects of much attention; the uncommonly dry weather, (in the vicinity of Boston,) has checked their growth, and insects are quite numerous. Unless we have more rain this month, we fear there will be a scanty bloom. The shoots should be kept constantly tied up, and the plants neatly trimmed: occasional syringing answers a good purpose.

Roses may be budded this month. Select stocks which run freely, and good, healthy buds, and there will not be much fear of success.

Geranium cuttings put in in June, should now be potted off.

Chrysanthemums should be repotted this month, and the plants occasionally watered with liquid manure.

Tree pæonies may be grafted this month, as recommended in our last; suckers may be also taken from the old plants at this season.

Heath cuttings, put in in April or May, should now be potted off into small pots.

Pansy seed may be now sown for producing plants which will flower freely next May.

White lily roots should be taken up, divided, and replanted, or they may be laid away till September, and then set out.

Verbenas.—Young healthy plants, (which are better than old ones,) for preserving through the winter, should now be layered off into small pots; they will have rooted well by the first of September.

Green-house plants, of most kinds, will need overlooking this month; all that need it should be repotted, or top-dressed, and prepared for a removal to the green-house or parlor in September.

Mignonette and *stocks* may yet be sown for flowering in winter.

Orange and Lemon trees should be budded this month.

Cactuses should be propagated by cuttings now.

Camellias may be inarched this month; attend to the saving of the seeds, or they will be lost.

VEGETABLE DEPARTMENT.

Celery, for a winter crop, should now be set out in trenches.

White onion seed should be planted this month for a spring crop.

Spinach, for spring-use, should be planted the latter part of the month.

THE MAGAZINE OF HORTICULTURE.

SEPTEMBER, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Random Records of Tropical Florida.* By DR.
HENRY PERRINE, Superintendent of the Tropical Plant
Company, Indian Key, Fa.

1840.—*July 4.* Thermometer 83°. Ye northerners, who have not ever resided in tropical climates, cannot realize the delightful reality of the delicious temperature of the *summer* season. You readily conceive the comforts of exemption from *cold*, during the months equivalent to your wintry season, but you cannot readily conceive the comforts of exemption from *heat*, during the months equivalent to your summer season. I am now writing in the cupola of my dwelling, which is erected over the sea. The constant trade wind is blowing its ever grateful sea breeze; and the temperature of 83° will show you what a cooling luxury the constant wind must be. In Boston, the thermometer may likely indicate ten degrees more of scorching heat, at this very hour. By the bye, I have selected from Mr. Howe's tables the temperature of several notable days in December and January last. Thus;—1839; December 22, 71°, 72°:—December 25, 71°, 76°.—1840; January 1, 70°, 72°:—January 8, 64°, 52°. You perceive that these are the dates of the landing of the pilgrims at Plymouth; of Christmas; of New Year; and of the victory over the British, at New Orleans. Recollect the weather, at the same dates, in Boston, or refer to your own meteorological registers, and you will then more fully *feel* the delightful difference of the weather of South Florida. To assist your conceptions of our climate, I subjoin an abstract

of our weather, for four years, from January 1, 1836, to January 4, 1840.

Annual clear days, 289 to 314.

Annual cloudy days, 15 to 36.

Annual rainy days, 36 to 60.

Rainy days in rainy seasons, from June 1, to October 1; 14 in 1837, and 26 in 1839—the least and greatest numbers.

Widest annual extremes of Fahrenheit's thermom. 50° to 90°.

Greatest monthly changes, 31° to 34°.

Greatest daily changes, 11° to 14°.

Least monthly changes, 6° to 8°.

Least daily changes, 0° to 1°.

With an average of three hundred sunny days every year, and only 40° of annual range of the thermometer; with a greatest monthly change of 34°, and a greatest daily change of 14°, you will readily conceive the superlative superiority of the tropical climate of South Florida.

Mr. Howe and myself have experienced the great pleasure, to-day, of making another remittance of valuable plants and seeds to the native Bahamians at Key Vacas. The poor people of that rocky island now appear to appreciate the importance of propagating the Manilla mulberry trees, and Sea Island cotton shrubs: and as their civil magistrates, Temple Rut and William Whitehead, Esqrs., have commenced the culture of both, we indulge the hope that their example will be imitated by their fellow citizens. Indeed, my intimate acquaintance with the native Bahamians has dispelled the prejudices naturally created among strangers, by the speculating monopolists of Key West, who commonly designate these amiable people by the insulting nickname of "lazy conks." But, by personal observations, I am now fully satisfied that our agricultural statesmen would promptly pronounce that the humblest grower of sweet potatoes at Key Vacas is an infinitely more useful citizen of South Florida, than the haughtiest office-holder of Key West.

The first settlers at Key Vacas in 1831-2, located under leases from Mr. Howe, who, with his brother, then held the title to the group of islands called Cayos Vacas, or the Key of Cows. Having subsequently disposed of all the islands, (save Duck Key,) to a Mr. Edmonston, in Charleston, S. C., and the distant proprietor having been disinclined to encourage any permanent settlement, the actual inhabitants are merely tenants at will, and are hence without adequate excitements to make permanent improvements. Nevertheless, the commencement of the savage war induced the later emigrants from the Bahamas to cluster round their countrymen at Key Vacas, until the population now amounts to about two hundred persons. As soon, however, as hostilities shall cease, or as

soon as Government shall guarantee only forty acres of public lands to each settler during the war, they will occupy the unsurveyed islands along the reef, and especially the preferable soils and sites of the chain called Key Largo. These temporary tenants of Key Vacas, nevertheless, have erected about fifty dwellings, half of them the very humble habitations of palmetto thatch alone, while others are comfortable frame buildings, of which some have neat palmetto roofs. After ineffectual endeavors to obtain a public school from the territorial government, they have recently established themselves a private school; and a few philanthropists are now endeavoring to encourage their progress in the means of literary and religious instruction. They now perceive that the production of raw silk and of Sea Island cotton can be easily accomplished by the feeblest hands of their women and children alone; and that these two precious staples will afford ample funds for schools and churches. The multiplication of these valuable plants which can be effected this very summer, will supply them sufficient stock in the fall or winter, to transfer with them to their permanent settlements on the unsurveyed public islands.

July 8.—By my first communication, you were apprized of the facts of the only mail packet facilities from Charleston, S. C., viz. that the only monthly mail was suspended during the first six months of 1839; and that the mail packet itself was wrecked on the third trip, in September. A new vessel was subsequently employed in the service, and continued to make monthly trips until last April. During the month of May, the contractors failed to send any mail. They however had a new schooner constructed, which commenced its first monthly voyage last June. She is called the "Hayne;" extended her last trip beyond Key West to Havana, and advertises for passengers to leave Charleston, S. C. the 1st, and Havana, in Cuba, the 15th of every month. Should this arrangement continue, the people of Indian Key can procure fruit monthly from Havana, and thus far become partially independent of the inimical population of Key West.*

July 9.—I observe that you consider the subjects of my communications are more important to the agricultural than to the horticultural portion of the community. In writing, however, for your journal, I do not consider it to be merely a horticultural periodical. On the contrary, it embraces more

* Nevertheless, her shortened stay in Charleston, S. C. will seldom leave time for northern answers to letters by the return mail.

important topics on the culture of plants in green-houses, hot-houses, and family apartments. It therefore contains more notices of tropical plants than of extra-tropical plants: it should therefore be christened with the comprehensive title of Magazine of *Vegeculture*. During many years, I have been obliged to use the terms of *vegeculture* and *vegecultural*, to indicate the objects of my own pursuits. Any care of any plant is a culture of that plant. The human labor employed in the propagation of all vegetables constitutes the human culture of those vegetables. The culture of vegetables is naturally expressed by the combination of words—*vegeculture*. *Vegeculture* is therefore the most comprehensive classifying term: agriculture, horticulture, arboriculture, floriculture, &c. are subdivisions of *vegeculture*. Look, then, at your articles which contain notices of the exhibitions of the Horticultural Societies of the United States. They are mostly plants in pots, from green-houses and hot-houses; they are mostly tropical plants.

I see, with regret, your notice of the death of the Hon. John Lowell. In August, 1838, I passed an hour with him, in his hot-house, at Roxbury. As he had recently returned from Cuba, he was entirely competent to appreciate the importance of accumulating tropical plants in tropical Florida. He was aware of the fact, that the poorest propagator of perennial plants, on the Florida Keys, can easily surround his humble habitation with a much more magnificent collection of tropical plants, than the proudest possessor of millions of dollars, in wintry Massachusetts, can ever accumulate in the costly hot-houses of monied ostentation.

I also observe, that seeds from the Southern Exploring Expedition, were presented to the Horticultural Society of Pennsylvania, by John McArran, of Philadelphia, to whom they were sent by the Secretary of the Navy. In July, 1838, I was indebted to the politeness of Mr. McArran for my visits to some collections of tropical plants; and I therefore, in *repayment*, now suggest to him the profitable propriety of abandoning his endeavors to have his own collections transferred to the city of Washington, and of turning his energies to the accumulation of valuable plants in a supplying nursery on the Florida Keys. Among the collections of tropical plants seen by me in Philadelphia, in July, 1838, I was most pleased with the splendid specimens of Mr. John B. Smith. With his taste and talents, one tenth of the capital in South Florida would create tenfold supplies of similar plants for the green-houses and hot-houses of the northern states. Indeed,

I cannot conceive a more profitable employment of capital than could be made in South Florida, by raising plants to supply the green-houses and hot-houses of the northern states, at one half the usual prices. What a great pity it is, however, that all the philo-vegeculturists of tropical plants, in the hot-houses of the United States, are almost utterly ignorant of the delightful district of tropical Florida!

July 10.—Notwithstanding your readers have *not* transmitted a single seed of the tropics through the patent office for the preparatory nursery at West Maticumba, I shall continue my endeavors to supply the northern hot-houses through that only channel, the agricultural department of the enlightened commissioner, H. L. Ellsworth, in Washington. By the copy of one letter from him, in reply to one remittance from me, you will perceive that he is duly sensible of the national importance of my individual services. I have now well founded hopes that the poor people at Key Vacas will collect the tropical seeds of the indigenous plants of these rocky Keys. I have found it, however, extremely difficult to make them conceive that I prefer a handful of wild seeds to a bushel of cultivated beans—one wild fruit of custard apple, *for its seeds*, to ten cultivated fruits of water-melons for their flesh—or one wild root of the indigenous coontee (*Zamia integrifolia*), to one hundred cultivated shoots of the sweet potato (*Convolvulus batatas*.) They are very grateful for my gratuitous services in curing diseases and encouraging education among them, but they cannot readily conceive that the greatest manifestations of their gratitude, in my estimation, will consist in the simple collection of spontaneous seeds and products of the Florida Keys. I wrote to you the failure of my attempts to induce them last summer to propagate the sixty-three varieties of cultivable seeds, gratuitously presented to them by me. Nevertheless, as I have excited their civil magistrates to commence the propagation of the Manilla silk mulberry trees, and the Sea Island cotton shrubs, I am again confiding to the other inhabitants superior varieties, especially of their favorite cucurbitaceous productions. Squashes, pumpkins, musk-melons, water-melons, &c. are all products of *patches* in their common field of perennial sweet potatoes. Now I wish you and your readers to understand distinctly, that I do not want a single seed or plant exclusively for my own use, or for the exclusive use of any tropical plant company which Mr. Howe and myself may be compelled to organize, to overcome the obstacles to individual industry, interposed by the exclusive monopoly of Key West.

I have shown you that Mr. Howe and Capt. Houseman are the only old residents who have the taste and means to propagate and preserve precious plants. But I do not want any person in the northern states to transmit any seeds or plants to any person or place in South Florida, unless he be a philanthropic philo-vegiculturist, who makes the transmission for the public benefit of South Florida, and for the general advantage of the whole United States. The transmitter should consider it a great honor to be the first introducer of any valuable plant into South Florida. One plant of a hot-house in Massachusetts, transmitted by the proprietor to South Florida, would entitle him to greater honor than his whole collection in his own possession. The first person who transmits a single Manilla hemp banana to South Florida will enjoy as enviable a celebrity as the first introducer of the Manilla silk mulberry into the United States. Mons. Perrottet introduced both the *Morus multicaulis* and the *Musa abaca* from the Phillipine Islands to the Garden of Plants in Paris, and to the French colonies in the East and West Indies, to Guadeloupe and Cayenne. Mrs. Parmentier, of Brooklyn, L. I., transmitted to Cape Florida the first *Morus multicaulis* introduced by me, on the 20th of May, 1833, for which my profound gratitude was manifested in the *Farmer's Register*. Madame Parmentier also transmitted, at the same period, the first New Zealand flax lily, or *Phormium tenax*, which, however, perished by neglect. Indeed, all plants transmitted by me, or for me, to Cape Florida, necessarily perished from gross neglect, except those plants which propagate themselves, and which hence have continued to spread themselves, in spite of the inundations of the ocean and the incursions of the Indians. Indeed, the great difficulties of obtaining the indigenous plants which are propagated by their suckers alone, are the great motives for the powerful interposition of governmental assistance. The indigenous plant, called rice, is easily obtained and introduced and propagated, because it is propagated by prolific seeds. The indigenous plants called sugar cane, are also obtained, introduced and propagated with comparative ease, because they are propagated by prolific cuttings. The exogenous plants, called grape vines and silk mulberries, are also introduced and extended with comparative facilities, because they are also propagated by prolific cuttings. But the Manilla hemp bananas, the New Zealand flax lilies, and the Sisal hemp agaves, cannot be easily obtained in their native countries, cannot be easily imported into South Florida, and cannot be prolifically propagated in South, because they are propagated by bulky, unprolific suck-

ers. Yet, when once introduced, they are superior to all other profitable plants in the admirable fact, that they continue to propagate themselves.

In Mexico, in the Phillipines, and in New Zealand, governmental vessels are requisite to obtain the plants, on account of the opposition of the barbarous natives. If the species of *Musa*, *Phórmium*, *Agave*, *Bromélia*, and other fibrous leaved plants, were as easily obtainable and propagable, as are the species of *Morus*, *Gossypium*, and other fibrous barked plants, the commercial cupidity of native Americans would have sufficed to introduce and diffuse them many years ago. Nevertheless, so highly do I appreciate the importance of associating my name with the introduction of a single plant of the Manilla hemp banana into South Florida, that I have tempted our plant traders (the Thorburns, &c.) by proffering two hundred per cent. net profits on the first *Musa abaca* that shall arrive in safety at Indian Key. As it is said that the *Phórmium ténax* has matured its seeds in the south of France, it is to be hoped that some seeds may be thence obtained for South Florida through the patent office at Washington. I naturally wish to retain life long enough to see the most precious plants of the tropics actually spreading in South Florida, but I am not anxious to be the first introducer of all precious plants. The Sisal hemp agaves, the Yucatan cotton shrubs, and the Manilla silk mulberries, are sufficient monuments of my ambitious perseverance.

By the last of March I obtained the first tea plant from Charleston, S. C., for the special care of my younger daughter; and by the next mail I shall endeavor to obtain the first olive tree for my elder daughter; and a New Zealand flax lily for my only son. My children are destined to be residents for life of South Florida, and I therefore fix their permanent affections in its slandered soils by the deep tap-roots of valuable perennial plants, to be grown by their own hands, in their own lands.

At pages 29 to 31 of the *Farmer's Register* for January 31, 1840, under the heading of "Governmental Obstacles to the Propagation of Tropical Plants in South Florida," you will see a sketch of the origin and objects of the two acts of incorporation of the Tropical Plant Company. During my first visit to Key West, from the 17th of June to the 17th of July, 1837, I ascertained that James Webb, then Judge of the District, was the only reputable resident, whose character and condition combined the circumstances essential for a co-trustee of any tropical plant company.

Judge Webb also corroborated my own opinion, that Charles Howe, Esq., inspector of the customs at Indian Key, was the only other person, on the Florida Keys, entirely suitable to be our official associate; and therefore volunteered to draft the new charter of incorporation, and obtain its passage by the legislative council of the territory, during the next ensuing session.

The new act, then, approved the 8th of February, 1838, was the voluntary work of James Webb, at Tallahassee, while I was pursuing my own labors at Washington, to obtain a congressional grant of a township of land. To fulfil the objects of that congressional act, my principal plans embraced the primary gift of a sufficient quantity of land to the Tropical Plant Company, for the purpose of establishing a nursery of supply, and a model of cultivation of tropical plants. Judge Webb well knew the indispensable necessity of the intermediate measure of an additional port of entry, for the requisite removal of governmental obstacles to individual industry; and therefore, unknown to Mr. Howe or myself, he addressed an official letter to the Hon. Secretary of the Treasury, warmly recommending that Mr. Howe should be appointed the first collector of the new port of entry. The long session of Congress closed the 7th July, 1838, with the usual neglect of necessary bills; and, under these circumstances, at New York, Oct. 15, 1838, I addressed a circular "To the Friends of the Enterprise," announcing that "the trustees will delay the organization of the company; and will apply their personal resources to the formation of a preparatory nursery at Indian Key, and the adjacent islets."

On the 8th January, 1839, the preparatory nursery for tropical plants was established by Mr. Howe and myself on West Matacumba, one mile west of Indian Key; but the insuperable obstacles to introducing into it the tropical plants of the Bahama Islands, &c., induced me, on the 22d October, 1839, to address to you the communication of that date which appeared in the Dec. number of your Magazine. Unfortunately for the company, the emigration of James Webb to Texas, (where he became secretary of state,) has deprived the remaining trustees of their only legal associate; and there has not yet arrived in South Florida any suitable personage to supply the vacancy of presiding trustee. The Hon. A. W. Snyder, M. C. of Illinois, was confidently expected at Indian Key, during the last autumn, to become a citizen for life of South Florida; but up to the present July we have not any news of him, and fear that he is dead. Our next hopes were directed towards E. A.

Williams, Esq., of your city of Boston, but months have elapsed without a line from him to Mr. Howe. But, under all events, Mr. Howe and myself are absolutely determined to remain without another associate trustee, until some person shall arrive much more suitable than any actual resident of the Florida Keys, including the sine qua non circumstance of citizenship for life of South Florida. Nevertheless, if Congress shall adjourn without opening an additional port of entry this session, we shall be compelled to endeavor to organize the Company prior to the next session of Congress, for the special purpose of enlisting the influence requisite to excite congressional action towards the bare restoration of desert freedom to individual industry in the desert district of South Florida. If Congress merely grant the humble prayers of the numerous memorials of the poor people of the Florida Keys, during the months of February, March and April, the actual residents alone will suffice to expel the murderous savages from the delightful everglades, and thus soon terminate the nominal warfare in South Florida.

July 12.—The mail schooner Hayne has arrived with your June number of the Magazine. I had hoped to see in it some extracts from my manuscript* in your hands, especially under the headings of "Tropical Products of South Florida," where every thing is tropical: not merely its botany, but its zoology, is exclusively tropical phytology. Conchology, ichthyology, ornithology are tropical subdivisions of its tropical zoology. I renew and extend my proffers of gratuitous collections at Indian Key, as long as I remain there. Mr. Howe writes to his nephew at Lowell, Mass., that he will supply barrels of products to his order, in Charleston or New York. He will also send to you by the present packet, on her return, some ripe fruit of the Manilla mulberries, of the second crop this year.† You have already some berries of the first crop, in February, and you will soon have some berries of the second crop in June or July. The fig trees do bear two full crops on this coral rock; but the present crop of Manilla mulberries is our first evidence that they may also bear two annual crops. You will perceive that the sum and substance of his desires, and of my desires, embrace the speedy emigration of agricultural settlers of virtuous habits. We mutually wish to exhibit solely the *facts*, which should excite immediate emigration of sober cultivators of profitable

* This has never been received.—*Ed.*

† These were received.—*Ed.*

plants. The preemption laws of the United States have sufficed for the settlement of all our other new territories, and would have sufficed for the settlement of South Florida, had it not been subjected to the exclusive monopoly at Key West, ever since the exchange of national flags in 1822. Nevertheless, the first emigrants next autumn from October to December, can profitably employ themselves in the propagation of the Manilla silk mulberries and the Sea Island cotton shrubs, because the cuttings of the former and the seeds of the latter can be obtained cheaply and abundantly. I have obtained, expressly for *gratuitous distribution*, six bushels of select seeds, of the finest Sea Island cotton, and they will be planted at intervals this summer, to create an ample supply for all emigrants in the autumn or winter ensuing. I have to use the words of the north, called autumn and winter, although we have not the seasons of the north.

To illustrate how little our national senators are acquainted with the climate and soil of South Florida, I refer you to the opposition of Hon. C. Clay, of Alabama, to the congressional act for the introduction and propagation of tropical plants:—"For aught he knew, the grantees might select a township valuable enough for the cultivation of Sea Island cotton." Indeed! He was not aware that every acre of the calcareous earth of South Florida is the most valuable in the world, both in soil and climate, for the cultivation of Sea Island cotton. He was not aware that the grantees could *not* select a single acre which was *not* valuable enough for the cultivation of Sea Island cotton. He did not know that Sea Island cotton was introduced into the southern states from the neighboring Bahama Islands. He does not know that on the Florida Keys it is a perennial plant of many years' duration—that Mr. Howe has plants at Duck Key from seed sown eight or nine years ago—that at Key Vacas there is a shrub of Sea Island cotton in bearing ever since 1823. He does not know, and cannot conceive, that, *for this very reason*, it cannot be profitably cultivated by large planters with numerous slaves; and that, vice versa, it can be most profitably propagated by small cultivators with feeble families. Indeed, it will be a more profitable business for family occupation than even the silk mulberry, in South Florida. The principal recommendation for the production of silk in South Florida is the fact, that it can be produced at any hour when the person or his family has not any thing better to do. But silly must he be who shall pluck leaves, to feed silk-worms, during the same days that he can pluck portions of Sea Island cotton.

I observe that a Mr. Beath, of Boston, has invented an improvement of the Sea Island cotton machine, (gin,) more important to poor propagators of the Sea Island cotton shrubs in the Florida Keys, than any modifications of raw silk reels are to the propagators of *Morus multicaulis* trees. The advantages, however, of the propagation of both the cotton shrubs and silk trees, on the Florida Keys, will extend to the poorest people of the remotest northern states. The dry season of South Florida extends from November to May, and silk can be spun and cotton can be plucked every intervening day. Invalids, if poor, have hitherto been debarred of the benefits of spending the wintry seasons of the northern states amid the delightful weather of tropical climates. But, hereafter, consumptive invalids may sail from New England to South Florida in October, and maintain themselves by light healthy labor on the Florida Keys, until the ensuing June. Even the Yankee girls, who annually visit our southern cities for winter employment, may hereafter spend the same months in South Florida, in the more profitable and pleasant pursuits afforded by the cotton shrubs and silk trees of the Florida Keys. Very few, however, will ever think of returning to settle for life again in the northern states, after six months' stay in South Florida, including either the wintry or summer seasons of their native countries.

July 16.—Mr. Howe has sent you some naked seed of the *Morus multicaulis*, because the ripe fruit, plucked the earlier days of this month, being left in an open glass, the fleshy portions have been eaten by cockroaches. Dr. Stebbins, of Northampton, Mass., has raised seedling plants of those sent him in the spring of last year, 1839, and will probably grow the seeds of the two crops sent him this year. It seems to me that your interest and duty, as editor of your peculiar journal, should combine to excite you to promulgate every fact connected with tropical Florida. Your journal can be absolutely filled, every month, for many years, with the materials of these Florida Keys alone. If Prof. Rafinesque, of Philadelphia, or Prof. Torrey, of New York, should spend a single day on a single Key of South Florida, they would find materials for your pages during several months. Dr. Torrey must send his colleague, Dr. Gray, to the Florida Keys, if they really desire to make their great work a complete Flora of North America, or even the United States. My time is necessarily devoted to the immediate means of expelling the savage Seminoles, and other objects connected with the Company.

You should know that, in Europe, the countries of the fig,

grape and olive, are calcareous countries; and you should also know, that, both in climate and soil, South Florida is superlatively superior to southern Europe for the propagation of olive and fig trees and grape vines. As, however, these are not exclusively tropical fruits, I have not excited any attention towards their production in South Florida, by public communications in the agricultural periodicals. To personal acquaintances, however, I have suggested the great profit of the speedy propagation of these celebrated plants, by the first cultivators on the Florida Keys. The New Englanders, however, who have already commenced their improvements in West Matacumba, are not practical cultivators by previous profession or occupation, and, hence, are not well adapted to form a nursery of select grape vines or fig trees. They have received seven varieties of grape vines for summer trial; but the best period to import such plants from the northern states is in the autumn. Messrs. Goodyear & Co. report, that they have planted two patches, each of five thousand trees, of the Manilla mulberries imported by them from the northern states, by the previous monthly mail, and they declare they shall make large importations of valuable plants, next autumn, to be brought by their colleagues, who have gone for their families. But none of them have the practical knowledge of an experienced nurseryman or old gardener, and I wish to impress on your mind, that the *first cultivators* of nurseries of supply of all useful plants will be the most profitably employed for their own peculiar gain, and for the good of the public in general.

Respectfully, &c.

H. PERRINE.

Indian Key, Fla.

The above desultory remarks by Dr. Perrine, upon the climate of South Florida, and the establishment of the Tropical Plant Company, will, we believe, be read with considerable interest. The preparatory nursery for tropical plants has already been commenced by Dr. Perrine, in connection with his trustee, Mr. Howe, and the *Morus multicaulis*, with some tropical plants, has already been extensively planted. We hope Dr. Perrine's efforts to establish an additional port of entry at Indian Key may prove successful, and that Congress, another session, will grant what the inhabitants of the Key so much require. When that shall be effected, we may look to the speedy formation of the Company for all the objects which Dr. Perrine has in view. In the mean time, we would urge cultivators and possessors of tropical fruits to forward to Dr. Perrine any seeds which they may think useful. We have, ourselves, a

few seeds of the *Phormium tenax*, which we shall take the first opportunity to send to Indian Key. The only object of Dr. Perrine is, to introduce every useful plant into South Florida, with the sole hope of rendering the establishment of the Company a benefit to the whole country.—*Ed.*

ART. II. *Visit to Kearsarge, with Observations on its Flora, &c.* By JOHN LEWIS RUSSELL, Prof. of Botany and Vegetable Physiology to the Massachusetts Horticultural Society, &c. &c.

HAVING lately embraced a favorable opportunity of ascending this fine elevation, which is at no great distance from Concord, N. H., and well known to the agriculturists of that State for its rich and fertile pastures, when cleared of its deep forests and subjected to cultivation, I offer for your pages the result. Kearsarge Mountain rises to the elevation of two thousand four hundred and sixty-one feet above the sea, and is a picturesque and prominent object in the foreground, as it were, of still higher elevations, the towering hills of the granite State. Near by, you have the long and diversely formed range of the Milk Hills and the noble Sunapee; the Green Mountains of Vermont and the White Hills in the extended view. Villages, with their white churches, are scattered in pleasing variety, and beautiful farms, and fairy crystal lakes glitter on every side, embosomed in forest shades, or contiguous to the towns. Now and then a glimpse of the Blackwater may be caught, meandering in its tortuous channel, and far away the Winnipissisogee, like a line of silver, expanding here, or again contracting where the sight is intercepted by the neighboring scenery of its shores.

Ascending from the village of Warren, an excellent road takes you up moderate elevations so gradually, that, after travelling three miles, and passing fine farms, you suddenly find yourself in immediate proximity to the mountain. Notwithstanding the unusual drought of last month, (July,) the grass on these farms was very superior in many places, and more than of middling quality in most. The fact of the influence of mountain height on vegetation is the more striking in such in-

stances as these, the more especially after leaving fields of grain and pastures, suffering most grievously for the want of sufficient moisture to support vegetable life in their accustomed vigor. It was here, on the roadside, that I first noticed gigantic specimens of the Angelica, (*Archangélica atropurpurea*, *Hoffm.*) a plant once in high repute among the savants of female medical lore for various complaints, and in itself a noble and striking plant. Although once by no means rare in this immediate vicinity, yet now cultivators seem to have almost exterminated it from our Flora. *Sambucus pùbens*, *Mx.* grows in abundance here, and at the time (July 6,) was in full glory of glowing red fruit, which, intermixed with its light green foliage, was a prominent object. Why is this fine shrub neglected in cultivation? Early in flower, it is an attractive plant, and in fruit it far exceeds many already prized. A single bush of it was growing close by a blacksmith's shop, which particularly attracted my attention; and, whether it was the contrast of so much natural beauty with the blackened roof and walls, or its own merit, we cannot say, but it helped to form quite a picturesque appearance. Further up the mountain the same shrub mingled itself with the elegant *Rùbus odoratus*, *L.*, then in full flower, and with the wild raspberry, (*Rùbus strigosus*, *Mx.*) scarcely yet ripening its fruit. On the cleared land the white clover (*Trifolium repens*, *L.*) carpeted the soil and perfumed the air, not unfrequently mingling its fragrance with the richer odors of the strawberry, (*Fragària virginiana*?) then in abundant fruit, and covering the ground in luxuriant profusion. So different in size and flavor from the wild strawberry of the lower lands near the sea, that one might fancy a distinct species; a point of inquiry we carelessly overlooked, regretting it the more on finding, subsequently, that Michaux describes another species, under the name of *Fragària canadensis*, which we should have been glad to have identified. On rising above these pasture elevations, we struck into the deep and rich woods, which denoted a depth of soil of great value. Here the most prominent object was *Oxalis acetosella*, which formed a constant carpet, and in profuse flower; its truly elegant veined corolla attractive to the most incurious eye. *Platanthèra orbiculata*, *Lindl.*, and *Microstylis ophioglossoides*, *Nutt.*, also sparsely occurred. *Còrnus canadensis*, *L.*, was yet lingering in flower.

As the ascent became more laborious and precipitous, we came into what is technically called the "black growth," consisting of spruce, peculiar to elevated ridges and rocky soils. Here we met with *Ribes rigens*, *Mx.*, or Mountain currant,

with prickly red berries of a most unpleasant flavor; rather pretty as an ornamental shrub. *Viburnum lantanoides* was intermingled, and occasional *Carices*, which were observed growing on the summit. In the hollows, now almost entirely dry, was *Sphagnum* sp., while in other cryptogamous plants we were greatly disappointed. A single *Grophina* was all we could meet with, and even lower down in the ravines and streams the mosses and lichens were scarce. *Potentilla hirsuta* (?) was, however, blooming on the very top.

The summit of this mountain presents a remarkable appearance. Totally divested of soil, the rocks are smooth and rounded, as if water worn. Where any strata are perceptible, they dip towards the south-east. Veins of coarse white quartz occur, which is sometimes tinged with a reddish hue. Gneiss is mingled with porphyry, the latter almost precisely the same, at least in appearance, with that which occurs on the coast of Massachusetts Bay, near Salem. Tolerable sized bowlders, of the coarsest porphyritic granite, are scattered over the top. A most singular variety of primitive formation is here conspicuous, and must afford the geologist a subject of interest. Remains of large trees are mouldering slowly away, the evident exuvia of a former heavy growth. Tradition indeed asserts that such was the case, and that fires were the immediate cause of its destruction, and the means of the denudation of the rocks. A few stunted spruces linger amid the crevices, and on the margin of depressions filled with sphagna; the rest is sterile and bare.

One would hardly imagine that we should find any signs of floriculture amid these hills. At the excellent farm-house of an acquaintance we saw the mountain ash, (*Pyrus americana*, *Del.*) transplanted from the adjacent ridges, while a little border of double pinks, balsams, asters, petunias, and many other pretty flowers, denoted a taste for the elegant pursuits of the garden. The more delicate fruits do not flourish; the winters being too long and severe for the peach, plum, and better kinds of cherry, and even the pear is of an uncertain growth. We saw a sour Morello cherry, (*Cerasus vulgaris*), however, full of ripe fruit, and very thrifty apple trees. In the village of Warren we were pleased with a simple but novel method of cultivating the *Convólulus sépium*; consisting of planting it under the windows, and training it on long stout strings, similar to the plan pursued by some with the morning glory, (*C. major*.) In this instance the former had the advantage: its rich green leaves, exuberant flowers, and pyramidal contour presented a pleasing aspect.

ART. III. *Notices of Green and Hot-houses, in and near Philadelphia.* No. 3. By A PHILADELPHIA AMATEUR.

Bartram Botanic Garden—Messrs. Carr, McAvoy, & Gale.

No one establishment in the country is of so long standing as the Bartram Botanic Garden. Owing to the increasing age of the late proprietor, Col. Carr, for some time past its plants and shrubbery have been wanting of attention, but now, under the supervision of Daniel McAvoy, Esq., every thing is rapidly acquiring a new face. The collection of green-house plants is moderate, and principally of standard, though with many new, varieties; camellias are numerous and of good growth, though principally of seedling varieties, most of which are from the single red: we noticed a number of fine plants completely covered with fruit; warratah, variegata, carnea, &c., which, in the course of time, will probably produce some good varieties.

The green-houses are now empty, with the exception of grapes, of which the collection is extensive. In the camellia house, the black Hamburg, white sweetwater, white Muscat of Alexandria, Chasselas of Fontainbleau, and Turner's black grape, were covered with fruit, which, though looking well, I, like the fox, should have certainly said, were sour, had not Mr. McAvoy's politeness induced me to change my opinion. The Cacti are in good health; I noticed particularly a fine collection of young azaleas, of all the principal varieties, in extraordinary health and vigor. The pelargoniums are numerous, but under cultivation, and principally of good sorts; it is a favorite plant with Mr. McAvoy, who grows his fine sorts principally in the open ground.

The nursery garden contains the largest and finest specimens of ornamental trees known in the country. One, the *Cupressus disticha*, is an immensity, being twenty-seven feet in circumference at the base. I noticed an uncommonly large specimen of the *Magnolia conspicua*, completely covered with flower buds. The *Magnolia acuminata* is next in size, in the garden, to the *Cupressus disticha*. The collection of evergreens is very extensive, and apricots, pears, apples, plums, &c., are equally as numerous, and in good health. I had scarcely time to examine fully into the merits of every thing, but will, at some more convenient opportunity. I observed, with much pleasure, that more attention has been bestowed in

this, than for the last several years, to the cultivation of native American plants and seeds, of which they have a very large stock on hand.

A PHILADELPHIA AMATEUR.

Philadelphia, Aug. 1840.

ART. IV.—*Descriptive notice of four new seedling Camellias, raised by Dr. J. L. Gunnell, Washington, D. C. By DR. J. L. GUNNELL.*

LAST year you was furnished with a short account of several of my seedling camellias, by the hands of Mr. Fuhner: having several other seedling plants which have flowered since that time, I have thought proper to send you the following descriptions of the same, viz:

Camellia japonica, var. *Mrs. Dolly Madison*.—A seedling of the old double striped or variegata. It has a pure white flower, about the shape of *Camellia coccinea*, though much more double, with rose-edged petals, an imperfect style, and but one anther; green pericarp. The only flower that has expanded was very late in the season, and that upon a small lower limb. The foliage is somewhat like *C. coccinea* and *acubifolia*. The plant promises an abundant bloom next winter, and it will, I presume, be a magnificent variety.

C. j. var. *Major Laurence Lewis* is a seedling of the old *C. variegata*: the flower is a fine crimson, with fifteen large rose-edged petals, and eight smaller irregular petals, an imperfect style, and a few anthers; green pericarp, and foliage nearly like the old striped. This will be a desirable variety.

C. j. var. *Gen. Henry Lee*.—A fine crimson flower, with twenty large rose-edged petals and ten smaller irregular ones, an imperfect style, and some stamens; foliage rather long. According to my label, it is a seedling of the old single red camellia. I have had several other seedlings from the old single red, with from ten to fifteen petals.*

C. j. var. *Judge Bushrod Washington*.—This variety was sold to me, recently, by my friend Mr. John J. Frobel, of Fair-

* We have a seedling which answers nearly to the description of the variety *Gen. Lee*, which we raised from the old single red; it promises to be a superb sort, when the plant acquires size.—*Ed.*

fax county, Va., who raised it from a seed. The flower is a light rose, or dark pink color, and is very much like *C. j.* var. *Flòyi*, as to color, shape, and size: the petals are rose-edged, and imbricated, (with sometimes a few small petals, and a few anthers in the centre like *Flòyi*, as it has bloomed here:) the pericarp is green, which will make it an easy bloomer; the foliage is rather roundish, like *C. j.* var. *speciosa*, but not so flat, in which it differs materially from *Flòyi*. It is a magnificent variety.

My seedling camellias, described in your Magazine heretofore (Vol. V., p. 210,) flowered again last winter. The camellia Old Virginia held true to its character. The variety George Mason, Sen. was rather more double, resembling in shape the *C. j.* var. *florida*, but with more guard petals, and with most of the petals heart-shaped instead of rose-edged, as heretofore described; the anemone centre was also more full. The camellia Gen. Thomas Nelson had more petals, which were mostly heart-shaped instead of rose-edged, as heretofore described. (I find, by particular examination that the old double white variety is also subject to this variation in its petals; they being sometimes rose-edged, and at others heart-shaped.) The variety Peter Francisco has bloomed twice, and is true to the character which has been previously given in your pages.

I have propagated many of my seedlings, and shall probably be able to supply amateurs and others with the following varieties after they have flowered the coming winter, viz:—*C. j.* var. Old Virginia, Peter Francisco, George Mason, Gen. Mason, Mrs. Madison, and Judge Bushrod Washington.

If you deem the above descriptions of interest to your readers, you are at liberty to insert them in your useful Magazine of Horticulture, and greatly oblige,

Respectfully, yours,

J. L. GUNNELL.

Washington, D. C., Aug. 1840.

ART. V. On the growth and treatment of the *Lilium japonicum* in pots. By the EDITOR.

In a previous volume (IV., p. 408,) we gave our readers an article upon the forcing of the common white lily, (*L. candidum*,) in pots. We had not, at that time, attempted the culti-

vation of any other kinds in the same manner; but last season, having a large number of fine bulbs of the *L. japonicum*, we planted out about a dozen of them in pots, in order to ascertain to what advantage they might be thus grown. The splendor of the *L. japonicum* is fully equal to the *L. candidum*, and although the flowers have not the delicious fragrance of the latter, they fully make up for its loss in their purer white, and large trumpet shaped, flowers, elevated upon a taller stem, and standing out upon a slightly curved and delicate footstalk. It makes a much more imposing appearance in the green-house than the *L. candidum*.

The following was our method of treatment:—About the middle of November, a dozen No. 4 pots were filled with a compost prepared of about one half loam, and one half decayed leaf soil, or very old manure, with a small quantity of sand. In this the bulbs were placed, one in each pot, just covering them with the earth. The pots were all set away underneath the stage in the green-house, where they remained until February, and were watered only once or twice during the intermediate period. Probably a frame would answer equally as well or better than a green-house, or perhaps a cellar, as the bulbs are perfectly hardy, and grow vigorously in the open air.

During the latter part of February, some of the pots were removed to the front of the green-house, when they began to run up their flower stems; as soon as they had attained a few inches in length and appeared strong, the plants were set up where they could receive more sun and air. They all came forward rapidly, and in April had thrown up their tall flower stems to the height of nearly three feet, each of which were terminated with from three to five of its snow white flowers. These were successively displayed as the pots of bulbs were successively placed upon the stage, and a fine show was kept up for two months.

After the stems had withered somewhat, the pots were removed from the house into an airy situation, where, after they had remained till signs of desiccation in the foliage took place, they were turned upon their sides, to remain until the middle or latter part of September, when they may be taken out of the pots and turned into the ground to regain their strength, and fresh strong bulbs from the border should be planted in their place, if the flowers are wanted.

We can recommend this species as affording a great deal of beauty in a collection, and, from its easy growth, a most desirable plant.

ART. VI. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Botanical and Floricultural Intelligence. Cryptogamia of Chelmsford, Mass.—At a late meeting of the Boston Society of Natural History, Prof. J. L. Russell read a paper, entitled "Remarks on the Cryptogamia of Chelmsford," accompanying which were specimens presented to the Society's herbarium, by the author. The following are the species which are noticed in Mr. Russell's remarks:—

Squamaria rubina Hoffm. Not mentioned in Hitchcock's *Catalogue* of the plants of Massachusetts. This lichen is considered rare in other parts of New England. In Chelmsford it is one of the most beautiful lichens, investing the surfaces of bowlders. Its synonymy, as ascertained by Mr. Edward Tuckerman, Jr., embraces *Lichen chrysoleucus* of Hud.; *Parmelia chrysoleuca* Ach.; and *Lecanora chrysoleuca* Ach. It is found uniformly on granite bowlders, in intimate association with, supposed to be, *Lecidea lapicida* Ach., which also is not found in Hitchcock's *Catalogue*. It is best distinguished by the apothecia chiefly occurring between the areolæ, and by their being black, with a margin of the same color.

Cornicularia lanata Ach., is met with: this plant does not appear to have been observed by any American botanist. Its co-species *C. pubescens* Ach., is to be seen on the same exposures, a fact at variance with the testimony of Acharius and other botanists.

Urceolaria scruposa, considered rare, is an inhabitant of the rocks, and is a curious and well defined lichen.

Of the doubtful genus *Leprària*, two species have been detected, viz:—*L. chlorina* on stone walls, and *L. latebrarum* of *Halsey*, on bowlders, and a third doubtful one, supposed to be the *L. viréscens*.

The large rocks afford the *Endocárpon miniàtum* and *E. smaragdàlum*, while the curious *E. Wéberi* is abundant in brooks. *Variolària amàra Halsey* and *Ach.* is abundant, its intense bitterness resembling quinine. This has been supposed identical with *V. fagínea*; but they are probably two different species, only to be distinguished by minute characters. Of the *Cetràriæ*, there are three of the four mentioned in Hitchcock's *Catalogue*, viz. *C. lacunòsa*, *C. ciliàris*, and *C. viridis*. An interesting small *Nephroma* is somewhat abundant on the faces of small sunken stones, in sunny exposures, which Mr. Tuckerman supposes to be *N. helvética*, and identical with the plants found by him in Newton. This also adds another new species to Hitchcock's *Catalogue*. Two species of *Ramallina* occur, viz. *R. fraxínea*, *R. polymórpha*, the latter common on stone walls. The *Borrèra furfuràcea* is common on the branches of the pitch pine. *Lecanòra fúlva Schw.*, is common on old elms and oaks. *Evérnia prunástri* of Hitchcock's *Catalogue*, or what has been supposed to be this, has been found in company with *E. vulpína*, which is very common. It has not a slight resemblance to the *Borrèra furfuràcea*, and it is supposed the *B. furfuràcea* was intended by *B. purpuràcea*, given as its synonyme. The following is the description of the *Evérnia prunástri*:—thallo albo, pallescente, lacunis dichotomo-multifidis, erecto, adscendentibus lineari alternatis planis rugosa lacunosus subtis subcaniculatis albissimus: apothecia disco rufescente.

Some interesting mosses have also been found, not inserted in Hitchcock's *Catalogue*. A minute moss, found by Edward Tuckerman, Jr., on the summit of Bear Hill, Waltham, proves to be *Weíssia controversa* of the catalogue, and identical with *W. viridula Hedw.*, given as distinct. Two species of *Polyptrichum*, and a supposed new one, have been found. A delicate fern, not previously seen in this section, has been found in company with the *Marchántia hirsúta Sch.*; it is the *Aspidium frágle Willd.*; it has been found in New York, in company with *Aspidium rhizophyllum*, and in both locations its habitat is about limestone quarries. (*Silliman's Journal.*)

Fúchia fúlgens.—This new and splendid species of the fuchsia is yet rare, and only found in the choicer collections in the vicinity: the plants are yet, consequently, small, from the desire of the possessors to increase it, and most of those which

have flowered have been small plants only a year old. One of the finest and most vigorous plants which has come under our notice, was one exhibited at the Massachusetts Horticultural Society's Rooms, by Mr. Tidd, of Woburn. Mr. Tidd is quite an amateur cultivator, and has succeeded in growing a cutting, in the short space of three months, to the height of upwards of a foot, the plant having upon it a fine raceme of its long, cylindrical vivid colored blossoms, to the number of twenty-five or thirty: the cutting was inserted on the 9th of May last, and when rooted was shifted from pot to pot, until it gained its present size. Mr. Tidd has been so uncommonly successful in his management of the plant, that we have urged him to communicate, through our pages, his method of treatment. Mr. Tidd has seed saved from some of the flowers fertilized by the *F. globosa*, and from it may be produced some new and elegant varieties. The fulgens is the parent of many very superb varieties which have been raised by the aid of careful hybridization, by English cultivators; and we hope our own gardens may be enriched by hybrid productions between the *globosa* and other species, which will add a new feature to the tribe, and render it so much more interesting, as to attract more attention by cultivators generally.—*Ed.*

New varieties of Verbenas.—W. C. Wilson, Esq., of Baltimore, has raised several hundred seedling verbenas, four or five of which are stated to be new and exceedingly pretty sorts, and one or two of them quite distinct: only a few have, as yet, flowered; but Mr. Wilson informs us that there is a very great diversity of foliage, and probably some of them may prove novel and highly interesting varieties. Mr. Wilson is as great an admirer of the tribe as ourselves, and plants every season large patches of all the finest kinds. We hope to have the opportunity to lay before our readers a description of all the distinct and desirable new kinds raised by Mr. Wilson, either by himself, or by some of our friends in Baltimore.—*Id.*

Seedling dahlias.—My seedling dahlias are beginning to flower, and there will be some fine varieties. I have about thirteen or fourteen hundred plants.—*Yours, T. Hancock, Burlington, N. J.* [Mr. Hancock is the raiser of that fine dahlia, the Hero of Tippecanoe, and we hope that he will be as successful in producing fine varieties from his seedlings, which he mentions as now about blooming.—*Ed.*]

Gaillardia picta, and *Erysimum Peroffskyanum*; are two very beautiful new annuals; the former with its large purplish flowers, bordered with yellow, and the latter with its spikes of bright orange blossoms, somewhat resembling a fine wall flow-

er: the latter flowers profusely, and is one of the prettiest ornaments of the garden. Both of them are of simple cultivation, and produce an abundance of blossoms, without requiring any particular care. *Erysimum Peroffskydnum*, planted in patches, attaining as it does to the height of from twelve to fifteen inches, presents, with its orange tints, one of the most attractive objects in the flower garden.—*Ed.*

Delphinium Barlowi, a beautiful perennial species, heretofore noticed by us (Vol. III. p. 250,) has been exhibited at the Massachusetts Horticultural Society's Rooms, the present season, by Messrs. Breck & Co. It is equally beautiful with the Chinese, and, like that variety, worthy of a place in every choice collection.—*Id.*

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

General Summary of the structure of Plants.—M. De Candolle, the celebrated botanist, has been publishing a work, in parts, entitled *Vegetable Organography*. It has just been completed, and a translation of it has been made by Mr. Kingdon, and published in London in two vols. octavo. This work is reviewed in a late number of *Loudon's Magazine*, from which we extract the following chapter, which concludes the second volume. It is so comprehensive in its character, and so fully answers to the title of the chapter, that we are sure it will be read with great pleasure. Every botanist and vegetable physiologist will, of course, wish to possess the work, but, as all our readers may not have the opportunity of so doing, we present the following in our pages. M. De Candolle's work is one of the most complete which the present age has produced. The "extensive views and enlightened generalizations of the author," says the reviewer, "meet the eye in every page, and carry us along in such a manner, that no person taking up the book would wish, if possible, to lay it down till he had read it through." The following chapter may be commended as a specimen of the work:—

"1st. A plant is an organized and living being, devoid of voluntary motion, having neither nerves, muscles, nor a central cavity resembling a stomach, and always, or nearly always, attached to the soil from which it draws its nourishment.

"2d. Plants are either wholly, or in a great measure, composed of membranous Cellules, closed on all sides, more or less united together, and enclosed, at least in their young state, in a membranous cuticle.

Those which are entirely thus formed bear the name of Cellular Plants.

"3d. Those which are thus formed in part, and which are called Vascular Plants, present, besides the cellules, cylindrical tubes which are called Vessels; these are never naked, but always surrounded by cellules.

"4th. In vascular plants we observe, moreover:—1st, that the cellules and vessels are united in very different degrees, so as frequently to leave between them empty spaces, called Intercellular Passages; 2d, that besides the purely membranous vessels, there are bodies rolled spirally, and endowed with great elasticity, which are called Tracheæ; 3d, that their cuticle is pierced (at least in almost every part exposed to the air,) with pores or Stomata, which appear to be evaporating organs.

"5th. The cellules are endowed with the faculty of uniting together, of absorbing the moisture around them, and probably of contracting and dilating. They are round, or more or less elongated; the former enclose the feculent, mucilaginous, or resinous matters which they have elaborated, of which the latter contains little or none. The round ones form the parenchyma; the long ones (by themselves in cellular plants, united with the vessels in vascular ones,) compose the fibres or nerves.

"6th. The passages between the elongated cellules, or the vessels, appear eminently to serve for carrying the lymph, i. e. the as yet unelaborated watery juices. Those which are formed among the round cellules contain the more stagnant juices.

"7th. The vessels, whatever their form, seem eminently intended to contain air or gas, and are true aerial canals, at least in the ordinary course of vegetation.

"8th. Certain particular points of the surface of plants, and especially of vascular ones, are more eminently endowed with the faculty of absorbing water. They are called Spongioles, and are situated at the extremity of roots, at the top of the style, and on the surface of seeds.

"9th. Dilatations of the intercellular passages, or, in certain cases, ruptures of the cellules, cause irregular cavities in the interior of the tissue. These receive the name of Air Cavities when filled with air, or of Receptacles of proper Juice when they contain an elaborated juice.

"10th. Glands, or glandular surfaces, are some of them composed only of cellular tissue, others of cellular tissue and vessels; both secrete special juices, but the first appear (at least in certain floral organs) to be excrementitial, and the second, recrementitial.

"11th. The surface of plants exposed to the air is often invested with Hairs, which are prolongations formed of projecting cellules. Some of these hairs are protecting organs for the surfaces; the others the supports or canals of excrementitial glands. They are always situated upon the nerves, whilst the stomata are always upon the parenchyma.

"12th. A vascular plant, considered lengthways, is composed of two bodies opposed by their bases (stem and root,) and which grow in a contrary direction to one another. Their point of junction is called the Neck.

"13th. The body which descends, or the Root, elongates indefinitely by its extremity alone; does not become green by the action of the sun, except at its extremity; bears neither leaves nor flowers, and

serves to fix the plant in the ground, and to draw up its nourishment.

"14th. The body which rises upwards, or the Stem, elongates throughout its whole length, till the period when it ceases to grow, unless by the development of a body resembling itself (branch,) and which is grafted upon it. It becomes green on exposure to the light, throughout its whole length, at least in its young state, bears leaves and flowers, and transmits to them the nutriment absorbed by the roots.

"15th. The stem of vascular plants is sometimes cylindrical, composed of a single system, (the Woody Body,) which increases by the development of new fibres internally; sometimes conical, and composed of two systems, (the Woody Body and Bark,) which increase in diameter by means of layers, which are developed upon the surface of each of these systems which is in contact with the other system. To the first the name of Endogens is given, to the latter that of Exogens. The structure of the root of each class is similar to that of the stem.

"16th. The stem of vascular plants is furnished laterally with appendicular organs, which seem formed by the expansion of one or more fibres.

"17th. These appendicular organs, although very different from one another in their appearances and uses, seem, however, entirely identical in their original nature.

"Those which are already formed in the embryo, bear the name of Cotyledons, or Seed Leaves; those which are produced immediately afterwards, Primordial Leaves. The following bear simply the name of Leaves. Those which immediately surround the flower receive the name of Bracts, and the flower itself is composed of several verticils of appendicular organs, much modified.

"18th. The appendicular organs perform, according to their position and mode of development, several different functions, of which the principal are:—

"1st, That of nourishing organs, as the cotyledons and leaves;

"2d, That of protecting organs, as the scales of buds, bracts, sepals, petals, carpels, in their last stage;

"3d, That of fructifying organs, as the stamens and the carpels, during the first stage of their existence. Several partake of both of these functions.

"19th. The nourishing appendicular organs are, at their origin, alternate in endogenous plants, called also, for this reason, Monocotyledons: opposite or verticillate in Exogens, called also Dicotyledons. In the course of their development, those of Endogens always remain alternate or spiral, those of Exogens may either remain in their primitive state, or take a spiral disposition.

"20th. The appendicular organs, which compose the flowers, are, in both classes, disposed in concentric verticils; the innermost are sometimes spiral.

"21st. The protecting appendicular organs hold a middle station, in form, size, color, and often also in position, between the two other classes; and we frequently see them metamorphosed, either into organs decidedly nourishing, or, more rarely, into fructifying ones.

"22d. The appendicular organs are generally composed of a petiole and limb, but one of them may be wanting. The Petiole, which is the bundle of fibres not as yet disunited, has its fibres longitudinal; the Limb, which is the part formed by the expansion of the fibres, has them more or less diverging. These fibres of the limb, or Nerves of

leaves, are generally curved in Endogens, and separate at angles more or less acute in Exogens.

"23d. The nerves of curvi-nerved leaves converge towards the apex, or diverge from a middle bundle. Those of anguli-nerved ones are pinnate, palmate, or pedate; but the portions of the limb of the three last classes are penni-nerved, so that this form seems essential to the leaves of Dicotyledons.

"24th. The leaves of Dicotyledons are the only ones which have been seen, either composed of joints or leaflets, or furnished with lateral stipules.

"25th. Germs, or the undeveloped rudiments of new individuals, appear able to arise from all parts of the surface; but there are certain points where they are developed in preference, such as the axils of the appendicular organs, and the extremities of the fibres of their limbs.

"26th. The germs which are placed in the axils of the appendicular organs, along the stem or petiole, may be developed by the action of the nutritive forces alone. Those which are situated at the extremity of the lateral fibres of the limb, almost always require (except in Briophyllum,) in order to be developed, a particular operation called Fecundation.

"27th. The germs which are developed without fecundation most frequently arise united to the mother plant without having proper envelopes, and without shooting out roots: they then form branches. Some separate when they are furnished with a tubercle or store of nutriment: they then form separate individuals, and produce roots.

"28th. Every stem or branch can shoot out adventitious roots. In Dicotyledonous trees, these spring from the lenticels; every branch, furnished with them, or capable of producing them, may easily be separated from the mother plant, and form a distinct being.

"29th. The germs which are developed by fecundation are always contained in a closed envelope, furnished with the rudiments of a root and appendicular organs. They receive the name of Embryos.

"30th. The unfecundated germs perpetuate the varieties of the mother plant; the embryos only retain the characters of races or species.

"31st. The appendicular organs which immediately surround the flowers, or the bracts, hardly ever have leaf-buds developed in their axils; this is still more seldom the case in the appendicular organs which compose the flowers.

"32d. The buds, or germs, which are developed into branches, are often protected in their young state by scales, which are nothing but the outermost appendicular organs of the young branch, modified by their position.

"33d. The flower, in which is the apparatus destined for the fecundation, is a kind of terminal bud, formed of verticillate appendicular organs, the outermost of which act the part of protecting organs, the innermost of sexual ones; but they are capable of changing their office, by being transformed either into leaves, or from one into another.

"34th. In the modifications or transformations of the appendicular organs, each is only usually converted into the nature of the verticil which follows or precedes it in the order of development or position. The first phenomenon, which is the most frequent, has received the name of Ascending, or Direct, Metamorphosis; and the second, that of Descending, or Retrograde, Metamorphosis.

"35th. The flower, being formed of verticillate organs, is necessarily terminal with regard to the pedicel, at least when the pedicel is not prolonged beyond it, as happens accidentally in certain proliferous flowers

"36th. Pedicels near one another, and composing the same inflorescence, are disposed after three systems:—1st, the outer or lateral ones are developed first, and the flowering proceeds indefinitely in a centripetal order; 2d, the central one, which is necessarily terminal, flowers first, and the flowering proceeds in a centrifugal order; 3d, these two laws are combined, the one affecting the general axis, the other the lateral branches.

"37th. The number of verticils in phanerogamous flowers is usually four; but it may vary, being either less when one is absent or united to the neighboring one, or more when one is composed of several verticils or similar rows.

"38th. The almost universal disposition of the pieces of each verticil or row, is that of being alternate with those of the preceding verticil or row.

"39th. The number of pieces of each floral verticil is generally three in Monocotyledons, and five in Dicotyledons.

"40th. All the caulinary, and especially the appendicular, parts of plants are capable of being united together, especially during their infancy; the union is a distinct phenomenon from the graft; it is the more easy in proportion as the nature of the organs is more analogous; it takes the name of Cohesion when it comes between similar organs, and Adhesion when they are different. The different degrees of adhesion of similar organs, or of the parts of the same organ, determine either its integrity, or the divisions or indentations of most organs.

"41st. All the caulinary or appendicular parts are capable, when they are filiform, of expanding into limbs; and, when naturally in the form of a limb, of presenting a cylindrical appearance. They may also, within certain limits, put on forms, sizes, textures, colors, and even functions and positions, varying in different points of the same individual or analogous ones; this constitutes the Degenerations or metamorphoses of organs.

"42d. All the appendicular organs, verticillate or spiral, are capable of presenting multiplications of number, both in the increase in the number of the verticils or spires, or in the increase in that number of the pieces in each of the systems.

"43d. All the organs of plants are susceptible of being abortive, either wholly or in part, and, consequently, of presenting simple rudiments, or leaving empty spaces.

"44th. All the irregularities observed in the symmetry of verticillate organs, and especially in that of flowers and fruits, appear to result from one of the causes mentioned in the four preceding paragraphs, or from the combination of several of them.

"45th. In particular, the unity or solitariness of the verticillate organs can only exist by the abortion of those which ought to complete the verticil, or spire, or by the union of several.

"46th. The fruit is formed by the Carpels, which may be free, or cohere together, or adhere to neighboring parts.

"47th. As the two margins of each carpellary leaf can bear ovules, the solitariness of the seed in a carpel, free or united to others, can only result from an abortion.

"48th. The embryo must be considered as the development, by fecundation, of a germ situated at the extremity of one of the lateral fibres of the carpellary leaf.

"49th. Cryptogamous plants present, in their organization, only partial indications of symmetry, which, in the present state of the sci-

ence, are not sufficient to enable us to recognize the laws. We cannot affirm, particularly, whether there is fecundation in all Cryptogamous plants, or whether several are not reproduced by unfecundated germs."—(*Gard. Mag.*)

ART. II. Domestic Notices.

The Massachusetts Horticultural Society hold their annual exhibition on Wednesday, Thursday, and Friday, the 9th, 10th, and 11th of September. Owing to our absence, the present number will be delayed a few days, and will not probably reach our distant subscribers before the exhibition takes place. Our account, however, of the flowers, &c., exhibited will be so complete, that we hope it will afford our readers as much interest as possible next to an inspection of the exhibition itself.—*Ed.*

The Pennsylvania Horticultural Society holds its annual exhibition at the Masonic Hall, Chestnut st., Philad., on Wednesday, Thursday, and Friday, the 16th, 17th, and 18th September. The exhibition will probably be very splendid, as the Society have offered liberal premiums, to which we refer the reader in a future page of the present number.—*Id.*

The Annual Exhibition of the New Haven Horticultural Society will take place about the first of October, no particular day having yet been decided upon. The Society have offered liberal premiums, to be awarded for the best articles exhibited on the occasion. The list is so long that we have no room to copy it: the aggregate amount is upwards of two hundred dollars, distributed in prizes of from one to five dollars each. The season appears so promising, that a splendid display is anticipated. We trust our correspondents, Mr. Silliman, jr., or Dr. Monson, will send us a complete account of the exhibition, in season to appear in our December number.—*Id.*

Tippecanoe peaches.—Our subscriber and correspondent, J. A. Lazell, Esq., of Columbus, Ohio, has sent us a few buds of a new seedling peach, which he has named the "Tippecanoe," and from his account of it, we judge it to be a valuable variety. The fruit measures nine inches in circumference, and for flavor and beauty is considered equal to any other kind in cultivation. The buds were kindly forwarded to us by mail, in a newspaper, and appear as if they would grow if budded into a free growing stock. Mr. Lazell will please accept our thanks for his kind attentions; and we hope to have the pleasure, at a future day, of reporting the progress of the trees and the maturity of the fruit, under our own observation, when we shall give a correct description of the variety. Our pages are not a fitting place for us to express our admiration or regret at the name Mr. Lazell has chosen for his seedling; if they were, we can assure him we should launch out into a more lengthy notice of the variety. We can only say, that no care shall be wanting on our part, to add so desirable a sort to our collection.—*Ed.*

New seedling pear.—Our correspondent, Dr. Bull, of Hartford, Conn., has sent us two pears, as specimens of a native variety which

is growing about sixteen miles west of that city. Dr. Bull's account of it is as follows:—"I send you a few seedling pears, which, for the season, I think decidedly superior to any other we have in Connecticut. They were handed me this day by a person who owns the original tree, and who has a young tree which he has raised from a sucker which he took from the root of the parent stock. The fruit of both are alike.—*Yours, E. W. Bull, Hartford, Conn., August 18, 1840.*" We regret to state that the pears did not reach us until the 25th, seven days after they were sent, and they were then so far decayed that it was impossible for us to ascertain their merits. We shall be happy to receive another specimen, when, if they arrive safely and in good season, we will endeavor to give some correct estimate of their quality.—*Ed.*

Horticulture in Ohio.—I think you encourage correspondents to speak so much of themselves, as to describe the rise and progress of their garden or nursery, if they are so fortunate as to have one. My grounds are situated half a mile from the capital of Ohio. I commenced my operations nine years ago, on fifty acres of dense forest. It is yet in a rough state, but I have planted out for bearing more than one thousand varieties of the most select fruits I could obtain from the nurseries in your region, and from the State of New York and other sources. More than one hundred varieties have fruited this season, and among them I have had some delicious fruits, but others which I received with high sounding names have proved worthless. In the spring of 1837 I received one hundred varieties of pear scions from Mr. Manning. The one sent as the true Capiaumont has fruited ten pears, showing it a good bearer, and it proves a most delicious fruit, ripening the middle of August, rather below the medium size, in the shape of a top; skin a golden yellow, very finely dotted all over with red or brick color. I have no means of determining whether it is true to its nomenclature.* It is evident that the same fruits ripen here about two weeks earlier than with you. I have, among other pears, the Seckel and Passe Colmar, loaded with fruit. The white Doyenne or St. Michael, which your pomologists treat as an outcast,† I also have in full bearing of fine, large, fair fruit, proving, as I think, that the bearing and quality of fruit depends more on the location than the age of the variety.

The St. Lawrence apple, from Mr. Corse, of Montreal, proves a most excellent fruit, ripening the first of September.

I have a very good green-house, fifteen by twenty-eight feet, filled, in season, with many valuable plants. I erected it in 1836. A taste for plants is evidently increasing in this region.

I have not room to say more in this sheet—*Most respectfully yours, John A. Lazell, Columbus, Ohio, August, 1840.*

Errata.—In our last number several errors escaped our attention. At p. 285, fifteen lines from the bottom, for "*sterile*" read "*fertile*." P. 293, five lines from the bottom, for "*productiveness*" read "*production*." Some errors also occurred in the spelling of the botanical names in the Massachusetts Horticultural Society's report; but, as these will be readily detected, we leave their correction until the appearance of our index of plants at the close of the volume.

* We do not doubt but that it is the true Capiaumont.—*Ed.*

† We recommend the remarks of our correspondent to our friend, Mr. W. Kenrick, who has given this fine variety the name alluded to by Mr. Lazell.—*Id.*

ART. III. *Pennsylvania Horticultural Society.*

The stated meeting of the Society was held in its hall on Tuesday evening, July 21, 1840—Joseph T. Mather in the chair. Reports from the standing committees on premiums for the intermediate meeting, held July 4th, were submitted.

By the Committee on Plants and Flowers, awarding the premium for the best twelve carnations, to Peter Mckenzie; and for the best American seedling carnation, (Crescentville,) to H. Carpenter.

By the Committee on Vegetables, granting the premium for the best squashes grown in New Jersey, to Adam Price, of Burlington. For the best bush beans, grown in Pennsylvania, to Jacob Engleman. For the best corn, grown in New Jersey, to Adam Price; and an honorary premium of two dollars, to Joseph Cook, gardener to William Norris, for a basket of very fine tomatoes.

By the Committee on Fruits, awarding each premium for the best red, white and black currants, to Messrs. Coopers, Turner's Lane.

To competitors on the present occasion. The Committee on Plants and Flowers awarded the premium for the most interesting collection of Plants, exhibited in pots, to Robert Buist. For the second best collection to A. Parker. For the best bouquet, to Joseph Cook; and for the second best, to Robert Kilvington. An honorary premium of two dollars to Joseph Cook, for a beautiful specimen of the seedling *Amaryllis Norrissi* exhibited, the flowers of which were fully eight inches across. Also, one of one dollar, to Robert Kilvington, for a fine bouquet of indigenous plants.

The Committee on Vegetables awarded the premiums for the best squashes, grown in Pennsylvania, to Jacob Engleman. For the best fruit of the egg plant, grown in Pennsylvania, to Jacob Engleman. For the best tomatoes, grown in Pennsylvania, to Jacob Englemaa. For the best carrots, grown in Pennsylvania, to A. Patton, gardener to Mrs. Kohne. For the best cucumbers, grown in Pennsylvania, to Wm. Sinton, gardener to Gen. Patterson. For the most interesting display of vegetables, to Albinus Felton. An honorary premium of two dollars, to Robert Kilvington, for turnips and beans exhibited, grown from seed presented to him by the Society. Also one of one dollar to Jacob Engleman, for a dish of fine okra, although not of the requisite quantity exacted by the schedule of premiums.

The Committee on Fruits awarded the premium for best gooseberries to Wm. Sinton; and an honorary premium of two dollars, to Wm. Chalmers, gardener to Mrs. Stott, for very fine black Ham-burgh and Grizzly Frontignac grapes; and one of like amount to John B. Smith, for some very fine figs.

The President presented to the Society some seeds of vegetables, and half a kilogramme of the seed of *Pegànum hârnala*, from Paris, with a letter from "le jardinier en chef du jardiù du Roi," in regard to its cultivation, and the value of the seed as a tincture or dye, calculated apparently to supply the place of cochineal; also, a copy of "Cours Theorique et Pratique de la Taille des Arbres Fruitiers par d' Albret." These articles were obtained and presented through the kindness of Dr. Henry Hollingsworth Smith, a young physician of this city, at present pursuing his studies in Paris.

Ordered, That the Corresponding Secretary return the thanks of this

Society to the chief gardener of the "jardin du Roi," for the *Pegànum hàrmala*, and to Dr. Smith for the other seeds and the book, and his attention in forwarding all the articles.

Ordered, That the seeds be delivered to the Committee on Seeds for distribution, with instructions to call the attention of gardeners to the request of the chief gardener of the "jardin du Roi," for information of any results in the cultivation and application of the seed of the *Pegànum hàrmala*, which may be worthy of attention; and that the book be placed in the library.

The Library Committee reported but one member as delinquent for fines over three months; and that an invoice of recent English publications had been received, and were in readiness for circulation.

Ordered, That two hundred dollars be appropriated for the increase of the library.

The Committee on Exhibitions reported, verbally, that they had determined upon holding the autumnal exhibition on the 16th, 17th, and 18th of September, at the Masonic Hall.

Members elected.—Mrs. Mary F. Robbins, Miss Spicer, Thomas Robbins, John Faussit, William Burr, Joseph R. Massey, Timothy Abbott, John K. Mitchell, M. D., Walter Cresson, John Miles, Joseph L. Moss, Samuel Martin, William Cook, Edward Armstrong, Lennington F. Shewell, Alexander Hutcheson, Charles Harlan, John B. Spackman, John C. Engleman, and Robert Golder.

Objects exhibited.—At the intermediate meeting of July 4th.—Flowers:—Cut carnations, by Peter Mackenzie, Robert Kilvington, and H. Carpenter.

Vegetables:—By Jacob Engleman, cucumbers of New Southgate and white spined kinds, and beans. By Joseph Cook, ripe cucumbers, some twenty-seven inches in length. By Gregory Lee, a cauliflower, three feet four inches in circumference. By Adam Price, corn and squashes.

Fruits:—Red and black currants, by Andrew Patton, William Graham, and Philip Reilly; and red, white, and black currants, by Messrs. Coopers.

On the present occasion. Plants:—By Robert Buist, for the first time, *Clerodéndrum speciosissimum*, *Erica ampullacea*, *E. carinata*, *Gloxinia coccinea*, *G. Menziesii*, and *G. speciosa elegans*, *Agapanthus umbellatus cæruleus et albus*, *Cattleya labiata*, *Combrætum purpureum*, *Erica mammosa*, *E. princeps*, *E. regerminans*, *E. Sebana rubra*, *Fuchsia fulgens*, *Gesneria spicata*, *Gloxinia candida*, *Ixora rosea*, *Jasminum trifoliatum fl. pl.*, *Nerium coronarium*, *Rondeletia speciosa*, and *Thunbergia grandiflora*. By Alexander Parker, *Agapanthus umbellatus*, *Ardisia crenulata*, *A. solanacea*, *Cassia tomentosa*, *Cucubalus stellatus*, *Eudomis punctata*, *Fuchsia coccinea*, *Gardenia florida*, *Hibiscus rosa sinensis atreus*, *Hoya carnosa*, *Lantana Douglassii*, *Maurandia Barclayana*, *Plumbago capensis*, *Rivina humilis*, *Swainsona galegaefolia*, *Sempervivum arborescens*, and *Vinca rosea*.

Vegetables:—By Jacob Engleman, squashes, of the long green and white bunch, okra, egg plants, tomatoes, carrots, cucumbers, beets, onions, and potatoes, of Mercer, Calamancia, and Nova Scotia white kinds. By Albinus Felton, squashes, egg plants, tomatoes, carrots, cucumbers, cabbage, and Swiss chard. By Adam Uher, fine tomatoes, lettuce, Mercer potatoes, beets, and beans. By Andrew Patton, carrots and corn. By Charles Conover, tomatoes and beans. By George Esher, tomatoes. By William Chalmers, sen., egg plants. By Gregory Lee, squashes, purple and white egg plants, turnips, and

beets. By Daniel Reilly, corn. By — Coopers, tomatoes and carrots. By Robert Kilvington, sugar beans and turnips, raised from the Bremen seed, presented to him by the Society.

Fruits:—Gooseberries, by William Sinton and — Coopers. By William Chalmers, sen., black Hamburgh and Grisly Frontignac grapes. By John B. Smith, figs. By Robert Kilvington, pears, four kinds.

The Society have issued their circular, announcing that its twelfth annual exhibition will be held at the Masonic Hall, on the 16th, 17th, and 18th of September. All cultivators are invited to contribute, and any thing sent to the Society, directed to the care of Messrs. D. Landreth & Co., 65 Chestnut street, will meet with prompt attention, and be duly placed on the Society's tables. The circular contains the list of premiums offered for the best articles exhibited. The gross amount exceeds two hundred dollars. We are compelled to omit the list for want of room. We annex, however, the following prizes offered for dahlias:—

For the best twenty varieties of dahlias . . .	\$10 00
For the next best twenty varieties of dahlias . . .	5 00
For the next best twenty varieties of dahlias . . .	3 00
For the best display of dahlias . . .	10 00
For the next best display of dahlias . . .	5 00
For the best American seedling, parti-colored dahlia . . .	5 00
For the next best American seedling, parti-colored dahlia . . .	3 00
For the best American seedling, self-colored dahlia . . .	5 00
For the next best American seedling, self-colored dahlia . . .	3 00
For the best ten varieties of dahlias, grown by amateurs . . .	5 00
For the next best ten varieties of dahlias, grown by amateurs . . .	3 00
For the best dahlia, grown by amateurs . . .	3 00
Thirty-two dollars are offered (in seven prizes) to encourage the growth of native grapes.	

Forty-eight dollars are also offered for specimens of the best foreign grapes, both from the open air and under glass.

The Society, to induce cultivators to forward articles for exhibition, defray all expenses of transportation.—(*Soc. Report.*)

ART. IV. *Massachusetts Horticultural Society.*

Saturday, July 25th.—The whole report of this meeting was not included in our last, owing to want of room: it is now subjoined.

Exhibited.—Fruit: From B. Guild, July or sugar-top pears. From O. Johnson, a fine cluster of Zinfindal grapes. From L. P. Grosvenor, apricots. From B. V. French, early Harvest, and Heath's early Nonsuch apples, and peach apricots. From E. M. Richards, early Harvest, red Astracan, and white Juneating apples. From John Hovey, early Harvest apples, and very large and superior white currants. From R. Milne, Portland, handsome forced peaches. From Gen. Sumner, nutmeg peaches.

Vegetables:—From A. Bowditch, tomatoes.

Aug. 1st.—An adjourned meeting was held this day—the President in the chair.

The committee appointed at the last meeting, to report upon the expediency of holding the usual annual exhibition of the Society, recommended that the annual exhibition should take place in September, the particular days to be set apart by the Committee of Arrangements, which report was accepted, and the same committee were appointed to nominate a General Committee of Arrangements, to superintend the Exhibition, to report at the adjourned meeting on Saturday next. [The Committee of Arrangements have decided to hold the annual exhibition on the 9th, 10th, and 11th of September, at the Society's room, in Tremont Row.]

Exhibited. Flowers:—From S. Walker, fine showy bouquets, composed of phloxes, &c. From A. Bowditch, balsams and dahlias. From Hovey & Co., bouquets. From Misses Sumners, Dorchester, a beautiful specimen of the annual chrysanthemum, very double and quilled, and a flower, the seed of which was received from Copenhagen.

Native Plants:—a collection from F. Parker and F. L. Call.

Fruit:—From E. M. Richards, the following fine varieties of apples:—early Spice, early Harvest, white Juneating, red Juneating, early Bough, Williams's Favorite, red Astracan, and Curtis's early Striped. From A. Bowditch, Sweetwater grapes, from the open air, and Williams's Bon Chrétien pears. From John Hovey, beautiful early Harvest apples. From Capt. Seaver, Roxbury, early Harvest apples. From B. V. French, two sorts of pears without name, and early Harvest, Williams's Favorite, Shropshirevine and river apples. From C. Golderman, fine black Hamburgh grapes and figs.

Vegetables:—From A. D. Jones, Brighton, handsome tomatoes and pumpkins.

Aug. 8th.—An adjourned meeting from last week was held to-day—the President in the chair.

The committee appointed at that meeting, to nominate a General Committee of Arrangements, to superintend the approaching annual exhibition of flowers and fruits, in September, reported the names of the following gentlemen who were chosen that committee, viz:—

Samuel Walker, William Oliver, Isaac P. Davis, L. P. Grosvenor, Thomas Lee, Marshall P. Wilder, Isaiah Stickney, Edward M. Richards, J. J. Low, John L. Russell, Benjamin V. French, Robert Treat Paine, Charles M. Hovey, William T. Eustis, John Towne, Samuel Downer, J. E. Teschemacher, Otis Johnson, David Haggerston, W. H. Cowan, Robert Manning, J. M. Ives, George Brown, M. P. Sawyer, Cheever Newhall, Joseph Brock, William McLellan, William Kenrick, Jonathan Winship, Henry Sheafe, Samuel R. Johnson, Ebenezer Putnam, J. C. Howard, S. Sweetser, P. B. Hovey, Jr., J. L. L. F. Warren, John A. Kenrick, William E. Carter, J. W. Russell, Rufus Howe, Samuel Poud, John Hovey, A. Bowditch.

A special committee to decorate the hall, and take charge of all flowers and fruits sent for exhibition, was also appointed, composed of the following gentlemen:—

Samuel Walker, L. P. Grosvenor, M. P. Wilder, William Oliver, C. M. Hovey, J. Stickney, E. M. Richards, David Haggerston, S. R. Johnson, J. L. L. F. Warren, J. W. Russell, W. McLellan, Rufus Howe, and A. Bowditch.

A committee to make reports of the flowers, fruits and vegetables,

exhibited on the occasion, was likewise appointed, consisting of the following members:—

Samuel Walker, E. M. Richards, J. L. L. F. Warren.

Mr. R. M. Copeland was admitted a subscription member of the Society.

Exhibited. Flowers: From S. Walker, fine large bouquets. From J. Hovey, pinks, carnations, balsams, tiger flowers, and bouquets. From J. G. Sprague, Marquis of Lothian dahlia. From A. Bowditch, bouquets. From Rufus Howe, bouquets. From W. Murray, seedling dahlias and marigolds. From W. Hancock, bouquets.

From Mr. Tidd, Woburn, a fine plant of *Fuchsia fulgens*, in bloom, only three months from the cutting. From Hovey & Co., splendid double balsams in nine varieties as follows:—rose, purple, white, scarlet, mottled, variegated, scarlet spotted, purple spotted and crimson spotted; also, *Striata formosissima* dahlia, and bouquets.

Fruits:—From E. M. Richards, the following fine apples:—red Juneating, Sugarloaf Pippin, early Bough, Webb, early Spice, Williams's Favorite, Curtis's early Striped, and Sops of Wine. From S. Pond, Pond's (?) seedling, and apricot plums. From the President of the Society, early Harvest and Shropshirevine apples, and Schuyler's apricots. From J. Hovey, handsome specimens of Williams's Favorite apples. From B. V. French, Irish peach apple.

From S. Walker, green Chissel and summer Franc Real pears. From C. Golderman, apricots. From F. Tudor, Madeleine pears, grown at Nahant. From S. Codman, apricots, grown at Nahant. From S. Sweetser, fine watermelons. From J. L. L. F. Warren, early Royal George peaches. From A. Bowditch, English Catharine, and Williams's Bon Chrétien pears and Sweetwater grapes.

Vegetables:—From S. Sweetser, handsome purple eggs. From E. M. Richards, fine purple eggs. From J. L. L. F. Warren, common sweet corn.

August 15.—Exhibited. Flowers:—From J. J. Low, by his gardener, Joseph Banks, the following fine dahlias, viz:—Queen Victoria, Coronation, (Elliot's,) Sir H. Fletcher, Springfield Major, Suffolk Hero, Etonia; also, beautiful double balsams. From W. Bacon, Roxbury, fine double balsams, German asters, and dahlias. From John Hovey, dahlias and bouquets. From P. Barnes, the following dahlias:—Marquis of Lothian, Victory, Quilled Perfection, Purple Perfection, Mary, *Striata formosissima*, and Clio perfecta. From D. McIntyre, dahlias, viz:—Ne Plus Ultra, Madonna, Sunbury Hero.

From Hovey & Co., fine dahlias, viz: Duchess of Richmond, Brown's Sarah, Mount Pleasant Rival, Sir Henry Fletcher, *Striata formosissima*, Horatio (Widnall's,) Mrs. Rushton, Glory, &c.; also, bouquets. From S. Walker, bouquets, and the following dahlias: Mrs. Rushton, *Striata formosissima*, Rival Yellow, Juliet, Sunbury Hero, Princess Victoria, &c. From F. W. Macondry, fine specimens of dahlias. From S. R. Johnson, beautiful double balsams and roses. From J. L. L. F. Warren, dahlias.

Native Flowers:—From Dr. E. Wight, thirty-one species and varieties of native plants.

Fruits:—From S. Walker, green Chissel pears. From Messrs. Winship, seedling pears, produced from seeds of the Heathcot pear, a native variety. [Not having been present ourselves at this meeting, we should be glad to learn from Mr. Manning the qualities of this seedling. Messrs. Winships would also oblige us by giving us some account of it, if they think it deserving of cultivation.]

From E. M. Richards, sugar-loaf pippin, red Juneating, and Williams's Favorite apples. From Dr. Swan, Medford, honey-sweetening apples, a large and showy looking fruit. From John Hovey, Williams's Favorite apples. From S. Downer, red and green Sweeting, Shropshirevine, and Williams's Favorite apples. From A. D. Williams Williams's Favorite apples, and two other unknown sorts. From N. N. Dyer, South Abington, a variety of apple, called the Ginseng.

From B. V. French, Garden Royal, River, Williams's Favorite, and Garden Striped apples. From R. Manning, large red and green sweet and Gravenstein apples; also, Gross Rousselet (*New Duhamel*), and Petit Blanquet pear. From S. Pond, Bingham, apricot, Pond's (?) seedling, and white Gage plums. From Capt. J. Clark, a variety of the Weeping cherry.

Vegetables:—From J. L. L. F. Warren, tomatoes of fine large size.

Aug. 22d.—*Exhibited.* Flowers:—From Joseph Banks, gardener to J. J. Low, a fine variety of dahlias, viz:—Countess of Mansfield, Springfield Major, Ne Plus Ultra, Marquis of Lothian, Coronation, Striata formosissima, Suffolk Hero, Lady Webster, Sir Henry Fletcher, Jackson's Rival, &c.; also double balsams. From W. Meller, Ne Plus Ultra, Quilled Perfection, and Jackson's Rival; also, verbenas, pinks and bouquets. From J. A. Kenrick, dahlias and bouquets, From W. Bacon, fine double asters and balsams, and dahlia Striata formosissima. From D. McIntyre, dahlias, viz:—Marshal Soult, Duchess of Kent, Sir Robert Peel, Striata formosissima, Lord Liverpool, Rienzi, Madonna, Marquis of Lothian and Lord Liverpool. From R. Howe, bouquets. From C. Golderman, dahlias. From P. Barnes, Middlesex Rival, Mrs. Bucknall, Striata formosissima, Quilled Perfection, and Countess of Liverpool. From J. G. Sprague, Unique, Henry Fletcher, &c. From S. R. Johnson, fine double balsams. From E. H. Derby, Salem, *Nymphæa odorata*. From Joseph Stickney, dahlias. From A. H. Hovey, Suffolk Hero and Striata formosissima dahlias. From J. L. L. F. Warren, dahlias.

From Hovey & Co., *Phlox Drummondii*, *Salvia Tendrei* (very handsome,) *Erysimum Peroffskyanum*, *Glaucolus floribundus*, and eighteen species and varieties of verbenas, viz:—*V. chamædrifolia*, *incisa*, *Tweediana* and *T. superba*, *Arrandiana*, *Binneyana*, *Pépperei*, *ignescens*, *fulgens*, *Eyreana*, *speciosa*, *Powellii*, *Winchesteri*, Wales's seedling, *Hirstii*, *Colcordii*, *Richardsoni*, and *teucroides*; also, a variety of dahlias and bouquets. From M. P. Wilder, the following dahlias:—Eva, Ne Plus Ultra, Constantine, Unique, Sir H. Fletcher, and Glory of the West. From S. Walker, dahlias and bouquets. From W. Kenrick, bouquets. From John Hovey, bouquets and dahlias.

Fruits:—The display of to-day was very large for a weekly exhibition; indeed, we think the Society's tables, at an ordinary Saturday's meeting, are not often better set out with fine specimens of fruit. The principal contributor was Mr. Pond, who showed, in all, twenty-eight dishes. The exhibitors were as follows:—From S. Pond, St. Ghislain, Cushing, Julianne, and Williams's Bon Chrétien pears, the latter very fine; there were two fruits on one branch, taken from a young tree grafted into a stock now only four years from seed; also, plums, viz. Bingham, white Gage, and Bolmar's Washington plums. From the President, Mr. Vose, very large specimens of the large red Sweeting, (an oblong fruit,) apple, and also the St. Lawrence apple, a seedling raised by Mr. Corse, of Montreal, the scions of which were sent to the President, by that gentleman.

From Rev. G. B. Perry, Bradford, handsome specimens of a sweet apple; the scions were taken from the original tree, now growing in Kingston, N. Y. The fruit was large and fair; color, a pale yellow, and the flesh of a fine sweet flavor, very tender and juicy. From the garden of Mrs. T. Bigelow, superior specimens of rareripe peaches; among them was one measuring ten inches in circumference. From James Russell, apples without a name. From S. R. Johnson, superb specimens of Bolmar's Washington and white Gage plums. From S. Walker, Frankreal d'Ete and green Chissel pears. From William Greenough, Cambridge, ripe figs from a tree growing in the open ground. From A. D. Jones, a large cantelope melon. From J. L. L. F. Warren, handsome Bingham plums. Messrs. Winship presented some fine specimens of the *Shepherdia argéntia*, or Buffalo berry.

Vegetables:—From John Hovey, a basket of superior tomatoes.

The Committee on Flowers held a meeting this day, agreeably to a notice by the Chairman. It was voted that the exhibition of dahlias for the premiums offered by the Society, agreeably to the report adopted by the committee, in May, take place at the Society's room, on Wednesday and Thursday, the 23d and 24th of September. Exhibitors must have their flowers all arranged in the stands before ten o'clock, in the morning, or they will be excluded from the premiums. Amateurs and others, intending to exhibit, had better notice the rules and regulations which may be found in our June number, p. 236.

Aug. 29th.—*Exhibited.* Flowers:—From J. Stickney, dahlias:—*Striata formosissima*, Unique, Marshal Soult, Reliance, Henry Fletcher, Essex Rival, Sulphurea elegans, &c. From D. McIntyre, Marquis of Lothian, *Striata formosissima*, Castanda, Bontisholl, (the two latter very good,) Splendissima, Suffolk Hero, Grand Purple, Ovid, Bowman's Premier, &c. From S. Walker, dahlias, viz:—Marshal Soult, Mrs. Rushton, Unique, Horsham Rival, *Striata formosissima*, Beauty of West Riding, &c.; also, *Tigridia conchiflora*, and large bouquets. From J. L. L. F. Warren, Noisette roses, *Stapelia* sp., asters and dahlias.

From M. P. Wilder, fine dahlias as follows:—Gaines's primrose, (fine,) Marshal Soult, Eva, Misses Johnson, Sir H. Fletcher, *Striata formosissima*, &c. From Hovey & Co., sixteen varieties of verbenas, (same as reported at the meeting of the 22d,) superb double balsams and asters, and dahlias, viz:—Horticulturalist, *Striata formosissima*, Mrs. Rushton, Unique, Reliance, Glory, Golden Sovereign, Sir H. Fletcher, Quilled Perfection, Stone's Yellow Perfection, Gen. Washington, &c.; also bouquets.

From S. R. Johnson, fine double balsams and Noisette roses. From A. H. Hovey, dahlias and German asters. From L. B. Haskell, Roxbury, Rival Yellow, *Striata formosissima*, and Countess of Liverpool dahlias. From John Hovey, fine marigolds, dahlias and bouquets. From P. Barnes, dahlias, viz:—Mrs. Rushton, Quilled Perfection, Maria Edgeworth, Sir H. Fletcher, and ten other flowers. From W. Meller, Ne Plus Ultra, dahlias, asters, bouquets, &c. From J. A. Kenrick, asters, dahlias, and double althæas. From R. Howe, handsome bouquets, composed almost wholly of dahlias.

The exhibition of fruits and vegetables, for want of space, we omit until our next number appears.

ART. V. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Pot and Sweet Herbs.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes, new:				Paraley, per half peck,....	25	—	
Chenangoes, } per barrel,	1 00	1 50		Sage, per pound,.....	17	20	
} per bushel,	50	75		Marjoram, per bunch,....	6	12	
Common, } per barrel, ..	1 00	—		Savory, per bunch,.....	6	12	
} per bushel, ..	50	—		Spearmint, per bunch,....	6	—	
Sweet, per bushel,	1 50	—					
Turnips:				<i>Fruits.</i>			
New, per bunch,.....	4	6		Apples, dessert:			
Ruta Baga, per bushel,...	—	—		Common, per bushel,	50	75	
Onions:				Extra, per bushel,.....	75	—	
New white, per bunch,....	4	6		Porter, per bushel,.....	75	1 00	
Red, per bunch,.....	4	5		Crab apples, per bushel, ..	2 00	—	
Yellow, per bushel,.....	75	—		Dried apples, per pound, ..	7½	9	
White, per bushel,	1 00	—		Pears, per half peck:			
Beets, per bunch,.....	3	4		Cushing,.....	37½	—	
Carrots, per bunch,.....	3	4		Epargne.....	25	37	
Shallots, per pound,.....	20	—		Bartlett,.....	50	62	
Garlic, per pound,.....	12½	—		Seckel,.....	25	37	
				St. Michael, per dozen;	37½	50	
<i>Cabbages, Salads, &c.</i>				Baking, per bushel,.....	1 50	—	
Cabbages, per dozen:				Plums, per quart:			
Early York,.....	37½	50		Common,.....	12½	—	
Savoy,.....	50	75		Extra,.....	25	37½	
Drumhead,.....	50	75		Whortleberries, per quart, ..	8	—	
Brocoli, each,.....	6	12½		Currants, per quart,.....	10	—	
Celery, per ropt,.....	8	12½		Peaches:			
Sweet corn, per doz.....	6	8		Common, per half peck, ..	20	25	
Pickles, per hundred.....	17	—		Good, per half peck,.....	25	50	
Mangoes, per dozen.....	25	—		Extra, per dozen,.....	25	50	
Peppers, per pound,.....	2	3		Grapes, per pound:			
Purple eggs, each,.....	8	12		Black Hamburgh,.....	50	75	
Tomatoes, per half peck,...	8	10		White Sweetwater,.....	37½	50	
Beans, (shelled:)				Wild grapes, pr half peck, ..	25	—	
Lima, per quart,.....	8	10		Watermelons, each,.....	12	37	
Sieva, per quart,.....	8	10		Muskmelons, each:			
String:				Common,.....	6	12	
Cranberry, per half peck,	20	25		Extra,.....	6	8	
				Cucumbers, per dozen,....	6	8	
<i>Squashes and Pumpkins.</i>				Cranberries, per bushel,....	1 00	1 50	
Squashes, per pound:				Lemons, per dozen,.....	12½	20	
Autumnal Marrow,.....	1½	2		Oranges, per dozen:			
Winter crook neck,.....	—	—		Sicily,.....	25	37	
Pumpkins, each,.....	20	—		Havana, (sweet),.....	50	—	
				Chestnuts, per bushel,.....	4 00	4 50	

REMARKS.—Our last report, in which we spoke of the long continued drought of July, had scarcely gone to the press, before refreshing and genial showers set in, and revived vegetation wherever it had suffered from the heat and dryness of July. These showers have fell at intervals up to the present date, and crops of all kinds of vegetables that were not much injured by the drought have been very abundant and fine. The month has been warm, without any sudden changes, and fruits generally have ripened well, and have been abundantly supplied. At the present moment of writing, the market has not been so

well filled for several years, nor have prices of both fruits and vegetables averaged so low a rate.

Potatoes have greatly improved, and good Chenangoes are more abundant; there is now a promise of a good winter supply. Sweet potatoes from New Jersey have made their appearance this week in considerable quantities and of fair size. Turnips do not yet come in by the bushel. Onions may now be had in quantities at quotations. Beets and carrots are now supplied by the bushel or larger quantity. No parsnips have yet been brought in. No radishes in the market. Cabbages, of all kinds, are abundant; Drumheads have just come in. Lima and Sieva beans very plentiful and of fine size. Corn abundant. Mangoes and pickles are plentiful. Tomatoes are brought in in immense quantities, but they are so much sought after that there is a ready demand. A few purple eggs have been brought in, but the sale is quite limited; when they are properly appreciated, they will be as much sought after as the tomato. Some fine brocolis have been brought in. Celery has also come to hand this week, of good size. Peppers plentiful. Summer squashes are gone, and their place is now supplied with autumnal marrows. Very few others are yet to be had.

The fruit market is most abundantly filled. Apples are a complete drug; only those of good quality command even the low prices in our quotations. A few whortleberries are yet brought in. Pears are very abundant, and of good quality and low prices; the Seckel, Andrews, Cushing, St. Ghislain, &c. are to be had. Plums, from New York, are abundant. The supply of peaches, up to the present period, has been wholly from New York, at prices averaging about four dollars per bushel; they are now brought in from the vicinity, and sell at low prices; some very extra command fifty cents per dozen. Melons very plentiful and cheap: we have not seen such fine ones raised in the vicinity of Boston for four or five years: the citron melon (for preserving,) makes a fine sweetmeat. Grapes are supplied in good quantities, wild ones very abundant. New cranberries have just come: there is the promise of a good crop. A few currants are yet brought in. Cucumbers are nearly done for the season; only a small demand. Lemons and oranges remain about the same as at the time of our last report.—*M. T., Boston, Aug 29, 1840.*

ART. VI. Obituary Notice.

DEATH OF DR. PERRINE.—It is with feelings of the deepest regret that we announce to our readers the death of our correspondent, the late Dr. Henry Perrine, of Indian Key, Fla. When we placed the communication from him, which appears in the present number, in the hands of the printer, we little thought it would become our painful duty to record his death. We had been absent about a fortnight, and when we returned, the first paper which we took up contained an account of the massacre of the inhabitants of Indian Key. We read on with increasing interest, and almost the first paragraph announced that Dr. Perrine was among the unfortunate victims who

fell a sacrifice to the brutal ferocity of the savage Seminoles. Most of our readers have probably seen the account of the horrid massacre in the journals of the day; but a correct account of the massacre of the inhabitants will appear, from the hands of Charles Howe, Esq., the co-trustee of Dr. Perrine, who was among those who so fortunately escaped. We have now a letter before us, which, although not written for publication, we take the liberty to lay before our readers, being assured that Mr. Howe will excuse us when he considers how much interest will be felt in the fate of his late friend.

"It becomes my painful duty to inform you of the death of Dr. Henry Perrine, who was one of the unfortunate number that became the victims of the brutal savage Seminoles, on the memorable morning of the 7th of August, on this island. His loss to his family and friends, and to the agricultural community and the country generally, can only be estimated by those who knew his worth. A correct statement of the total destruction of this beautiful village will be published in several of the northern papers, and I have requested one copy to be sent to you.—*With great respect, I have the honor to be, dear Sir, your obedient servant, Charles Howe, Indian Key, Fla., Aug. 24, 1840.*

In the mean time, we extract the following from the account which has been already given in the newspapers of the painful transaction. The family of Dr. Perrine arrived safely at St. Augustine, and from them this statement was obtained:—

"About two o'clock, on the morning of the 7th inst., a Mr. Glass, in the employ of Mr. Houseman, happening to be up, saw boats approaching, and informed a person in the same employ, when they passed into Mr. Houseman's garden, and were satisfied that they were boats containing Indians. The Indians commenced their firing upon the houses of Mr. Houseman and Dr. Perrine; the former of whom, with his family, and that of Mr. Charles Howe, succeeded in escaping to boats, and crossing over to Tea Table Bay. The family of Dr. Perrine passed through a trap door into their bathing rooms, from whence they got into the turtle crawl, and by great effort removed the logs and escaped to the front of Houseman's store. They went to a boat at the wharf, which six Indians—all who remained—had partly filled, and were in the store after a farther supply. They then pushed off, and pulled with an oar, a paddle, and two poles, towards the schooner Medium. They were met by a boat when they had rowed a mile, and taken to the schooner.

"Mr. Motte and wife, and Mrs. Johnson, a lady seventy years of age, fled into an outhouse, from whence Mrs. Motte was dragged by an Indian, and while in the act of calling on her husband, "John, save me," she was killed. Mr. Motte shared the same fate, and was scalped; and the old lady as she was dragged forth, suddenly jerking from the Indian, broke his hold and escaped under a house. Her grandchild, a daughter of Mrs. Motte, aged eleven years, was then killed with a club, and the infant strangled and thrown into the water. This was seen by Mrs. Johnson from her hiding place; but the Indians fired this building, and she was again forced to flee, and escaped to Maloney's wharf, where she secreted herself, and was finally rescued. A. Sturdy, a boy about eleven years of age, hid himself in the cistern under Mr. Houseman's house, and was scalded to death by the burning building heating the water. The remains of an adult skeleton were found among the ruins of Dr. Perrine's house, supposed to be the Doctor, as well as a child, thought to have been a slave of Mr. Houseman."—(*Newspaper.*)

Accompanying the account referred to in Mr. Howe's note, which we shall publish as soon as received, we shall offer some further remarks upon the late services of Dr. Perrine in establishing his preparatory nursery at Indian Key, and his future objects upon the main land. We received from Dr. Perrine, at the same time that we received the communication in this number, a correct drawing of Indian Key, made by one of his daughters, with the houses and gardens of Dr. Perrine and Mr. Howe. We shall improve an early opportunity to present our readers with a sketch of the same.

HORTICULTURAL MEMORANDA

FOR SEPTEMBER.

FRUIT DEPARTMENT.

Grape vines, under glass, will now have ripened their crop, and probably most of the fruit will be cut by the middle of the month. Give an abundance of air on all fine days, and be careful and take every precaution to ripen the wood, for bearing next season, and give it a good color.

Strawberry beds may yet be planted with success. Where they were made in August, they should be watered occasionally if the weather is dry, and the beds will also need hoeing once this month.

Raspberry beds may be also formed this month; a good rich soil should be selected to have abundant crops, and those fine sorts, the Franconia and white Antwerp, selected.

Fruit trees, of all sorts, may be removed in October with safety.

Strawberries, for forcing, should be potted, if not already done.

FLOWER DEPARTMENT.

Dahlias are now flowering; give them occasional supplies of water and they will produce better specimens of flowers. Tie up the branches, and trim out all superfluous shoots; syringing over the plants is better than watering at the roots.

Gladiolus, amaryllis, and other tender bulbs, may be taken up at the latter part of the month.

Roses will need repotting, pruning, &c., before they are taken into the green-house.

Geraniums should be all ready to move into the green-house.

Chrysanthemums will need to be liberally supplied with water.

Tiger lily, and white lily bulbs, taken up in August, may be set out now.

Verbenas may yet be layered off into small pots.

Cactuses should not now be so liberally watered.

Ixias and sparaxis may be potted this month.

Oxalis Bowiei, rosea, &c. may be potted now for early blooming,

Stocks, sown in August, should be potted off this month into small pots.

Callas should now be repotted and supplied with water.

Camellias will need cleaning, top-dressing, and perhaps some of them repotting, before they are taken into the house.

THE MAGAZINE OF HORTICULTURE.

OCTOBER, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes on Gardens and Gardening, in New Bedford, Mass.* By the EDITOR.

DURING a passing visit, through New Bedford, a few weeks since, we improved the opportunity of inspecting some of the gardens which exist in the town. We were not aware that so much attention had been given to gardening, and were most happily disappointed in finding so many residences which evinced such excellent taste in the laying out of the grounds, and in the beauty and neatness in which every thing around them were kept. We think we do not err when we say, that a greater number of well laid out and well tilled gardens are to be found, in New Bedford, than in any other town of the same size in the country. We regret that our time did not allow us to call at all those where there appeared to be any thing to notice, for it would have given us the greatest pleasure to have offered some observations upon many besides the few to which our remarks at the present time will be directed. We hope, however, at a future period, to be able to devote a few more pages to the subject, and include some notice of every garden of any extent in the town. A stranger riding through that part of the town, not exclusively devoted to business, would be at once struck with the many highly ornamented gardens which meet his eye in every direction; while, from the style and neatness of the dwellings, and the air of high cultivation which is apparent almost every where, he would be confirmed in his opinion that few towns can lay claim to such a general taste for gardening as New Bedford.

The town is beautifully situated for fine residences: it stands upon the sea-shore, opening to a noble view of the harbor. The land gradually rises, from the water, to an elevation of from seventy-five to one hundred feet, and upwards, and from the highest point it recedes into the interior, in undulations of greater or less extent, with a tolerably well wooded and picturesque back ground. The streets run nearly at right angles; the principal one being County street, which runs parallel to the water, about north and south, at the most elevated point. It is, we should judge, a mile or more in its whole length, and, for a long distance, is lined on either side with the most beautiful dwellings, with elegant gardens adjoining the same. The soil is generally a strong loam, rather inclining to clay; but it is well adapted for ornamental purposes, as we noticed the turf retained its verdure to a remarkable degree, and that ornamental trees were as densely clothed with a vigorous and deep green foliage as we have scarcely ever seen them elsewhere. The natural advantages of the town, both for beauty of prospect, and a soil favorable to most purposes of vegetation, are not surpassed by any other in New England.

From Fairhaven, on the opposite side of the river, New Bedford presents a picturesque appearance. Bordering the river, and receding for some distance upwards, is situated the commercial part of the town, closely covered with neat and substantial buildings; beyond this, rise up the more elegant dwellings of the wealthy inhabitants, surrounded with gardens well filled with trees and shrubs, overlooking a greater portion of the town; and from the point we have named, this part of it seems studded with delightful villas.

The gardens which our time would only allow us to visit, were those of James Arnold, Esq., J. H. Howland, Esq., and Joseph Congdon, Esq., the two former situated on the westerly side of County street, and the latter at the distance of about a mile from the town. Those which appeared to possess much interest were those of J. Grinnell, Esq., Mr. Wall, — Howland, Esq. We shall notice the three first named in course.

Residence of James Arnold, Esq., County street. August 24th.—The delightful grounds of Mr. Arnold are situated on the west side of County street, nearly opposite the head of Union street. The site is one of the most elevated in the street, and commands a view of the harbor, and beyond, on the opposite side of the river, the neat and flourishing village of Fairhaven; to the west stretches out a vast extent of country, well wooded, and in some directions presenting varied and interesting views. The grounds around the house

fall away in a very gentle slope, bounding upon the street on the east, and extending to the west into the yet uncultivated portion of the town. The whole, we should judge, comprising some six or eight acres, which are laid out in a pleasure ground, a flower garden, vegetable garden, orchard, &c.

It is our intention, at some future period, with the consent of Mr. Arnold, to present our readers with two or three engravings, illustrating some of the most interesting portions of his garden: so pleased were we with all the arrangements, that, had we had the time, and liberty to do so, we should have made one or two sketches upon the spot. Mr. Arnold's grounds are decidedly the most ornamental that we have ever seen, and convey to those who have not a good conception of the modern or English style of gardening, a better idea of what this style consists in, than they could learn by reading a hundred descriptions of the same. We shall therefore, at the present time, only enumerate some of the principal features, and leave the complete details till we have an opportunity to present them in connection with the views which we have just referred to.

The house stands about one hundred and fifty feet from the street; a broad carriage-way enters on one side, and, sweeping by the entrance to the house, in a semicircular form, opens to the street on the opposite side. Between this carriage-way and street there is a fine lawn; this is varied by two or three elegant groups of trees, which break the view of the house from the street, and likewise convey an idea of greater extent, by partly preventing those who are entering upon the approach, from seeing those who are departing from the house. From the approach, on the south side of the house, about two thirds of the distance from the entrance, a walk leads up to the conservatory, the back of which stands up against a wall running west from the rear of the house. In front of the conservatory is a fine flower garden, laid out with dug beds on turf. This garden is bounded by a wall on the west, and by the back of the grapery on the south; and, to screen the latter building from the eye, a vigorous and luxuriant growth of the woodbine has covered it so completely, as to scarcely leave an open space. A rock-work, in a small way, but erected mostly with rare specimens of quartz, &c., and covered with verbenas and petunias, is an interesting feature of this garden.

Passing into a straight walk which leads from the conservatory, by the flower garden, (which is screened by a hedge from the lawn front,) to the grapery, we entered upon a portion of the pleasure ground: this is laid out with most excellent taste

and judgment. The work was executed by Mr. Jones, formerly gardener to Mr. Arnold. Continuing through the winding walks, shady bowers, and umbrageous retreats, through which rustic seats were placed, we arrived at the shell grotto. This is an ingenious piece of work, finely executed under the direction of Mr. Arnold. The roof is supported by columns of rough trunks of trees, the outer part of the roof thatched, and the ceiling elegantly inlaid with shells, quartz, &c. A rustic sofa and table are the only articles in the interior. So secluded is this grotto, that the robin has built its nest and reared its young in some of the niches left for that purpose. From this we pass through other portions of the ground, and enter upon the main walk which leads round the kitchen garden, near to the southerly boundary, to the place from whence we started; the kitchen garden is shut out from view by a hawthorn hedge. This may be called a general view of the grounds, and, though necessarily an imperfect sketch, will convey some idea of the good arrangement of every part. We should remark, that between the lawn in front, and the pleasure ground, a belt of trees, composed principally of evergreens, running at a right angle with the street, to the grapery, screens the whole from the view of any person entering the house. On the north the grounds are planted mostly with ornamental trees and shrubs.

The conservatory contained little in it of merit at this season. Mr. Young, under whose management the grounds are highly kept, has succeeded in impregnating the *Cereus grandiflorus* with the *C. speciosissimus*, and the pod was now, (Aug. 24,) swelling finely. The collection of camellias is quite limited, but Mr. Arnold informed us, he should augment it considerably the coming year, and also add many other new and beautiful plants. In the grapery the vines were just recovering and making good wood, after they had been suffering under the mismanagement of the gardener who last had the care of them. On the back wall the peach trees had made an excellent growth of young wood. The collection of dahlias is very good, and a choice variety of annuals filled the dug beds in the flower garden.

Mr. Arnold, with his lady who is a great lover of flowers and plants, has travelled much in England, and on the continent, and has visited all the fine public as well as many private gardens, which exist in France or England. And it is to his good taste, in connection with that of Mrs. Arnold, that his grounds present such a finished and picturesque appearance. It would delight us to see other gentlemen follow the example of Mr.

Arnold; and if it should be in our power to offer, hereafter, such plans and views of his residence, as we hope to have the pleasure of doing, we shall look forward to see the gardens of many gentlemen, which are capable of being made equally beautiful, but which have presented no attractions to the visiter, laid out in the same style, and kept up in the same finished manner that characterizes every part of Mr. Arnold's grounds. We are confident that nothing is wanting to render villa residences generally as attractive as Mr. Arnold's, but a judicious and tasteful method of arrangement, without any more expense than is generally attendant upon planting them in the ordinary manner. We shall undoubtedly notice this place at an early opportunity.

Residence of J. H. Howland, Esq., County street.—County street, but a short distance to the south of Mr. Arnold's, gradually descends the hill, on to a somewhat level plain, which extends to the harbor on the east, and to the south, into the yet but slightly cultivated part of the town. Mr. Howland's residence is situated at the commencement of the street and on the same side as Mr. Arnold's; the whole grounds have been planted within a few years, and every thing yet wears the aspect of a new place. The garden in front, and to the north and south of the house, is devoted mostly to fine fruit; and a piece of land, of an acre or more in the rear, devoted to fruits, flowers, and vegetables; still farther reaching to the unreclaimed land, yet covered with bushes and briars, Mr. Howland has an acre or two, which is brought into such a state as to reap a very large crop of clover: on the borders of this field Mr. Howland intends planting raspberries, &c., and for a time will keep the remainder down to grass.

In the rear garden, which is laid out with a beautiful walk around the whole, and cross walks in the centre, there is a good variety of pear trees growing very vigorously; several of them are old trees, which Mr. Howland has engrafted, and the young scions have made excellent wood. Among other practices of this kind, which he performs himself, he has adopted budding with the terminal eye and a small portion of the branch; the bark of the stock has two incisions made similar to the mode by budding; the scion is pared down on one side, and the whole is then inserted under the bark, and bass matting or yarn applied in the usual manner. By this method considerable time is gained: the operation may be performed in July, and a strong shoot will be made the same season. The borders of the walks of this garden are devoted to flowers, and the quarters

to trees and vegetables. On the west wall, Isabella grapes are planted, which were bearing a profusion of fruit.

In front of the house, the whole ground, which was in turf until the present year, and planted with trees, has been broken up. Mr. Howland, having found it too much labor to dig annually around the trunks, and manure them properly; and the trees having been rather thickly planted, the turf was so cut up that its beauty for that object was lost; the soil was, consequently, in a rough state from late turning up, but another season it will have the aspect of a cultivated garden. Mr. Howland does not aim at any thing very showy; but he has a choice collection of fruits, which he manages almost entirely with his own hands, and among them are included many of our most esteemed sorts. When it is taken into consideration, how short a period has elapsed since the spot where Mr. Howland resides was an uncultivated field, (only four years,) he is entitled to much credit for his labors.

Hazlewood, Joseph Congdon, Esq.—This is the name of a place which Mr. Congdon has selected for a country residence: it is nearly two miles from the centre of the town, and is said to be a delightful spot. We had the pleasure of calling on Mr. Congdon, at his present residence, and unfortunately he was absent at Hazlewood, directing improvements which he is now making, preparatory to erecting his house. Had our time not been so limited, we should have visited the place; but we shall have, undoubtedly, more to interest us and our readers, when he shall have erected his house, and completed some of his intended plans, than if we had described it in its now almost wild and natural state. We merely mention it now, as Mr. Congdon is a gentleman of taste, and we have no hesitation in saying he will make Hazlewood one of the finest residences in the country.

The gardens of several other gentlemen are well deserving a notice in our pages; but from the reason we have once or twice named, and not having an acquaintance with the proprietors, we are not enabled to give any account of them at the present time. As New Bedford now lies within two or three hours' ride of the city, and over one of the best rail-roads in the country, affording a delightful trip in the summer season, we shall, at an early opportunity, revisit this place, and extend our remarks to every garden worthy of notice.

ART. II. *On the Cultivation of the Black Mulberry.* By
J. W. RUSSELL, Superintendent at Mount Auburn, Cambridge.

THE Black Mulberry tree, which is commonly met with throughout England, in the pleasure-grounds and parks of the opulent, is much esteemed for its delicate fruit. I have seen but few trees of this variety under cultivation in this country, and the only reason that I can account for its not being more generally grown is, that the fruit is not so well known or appreciated as it is in most parts of Europe.

Mulberries that are raised from seed, have frequently *male* flowers, therefore produce no fruit: these should never be chosen for fruit-bearing trees. The only sure way of raising mulberries is from cuttings of the former year's shoots, having one joint of the two years' old wood. Plant them out as soon as the frost leaves the ground in the spring, in rows one foot apart, and at the distance of two inches in the rows, leaving only two buds above the ground; cover the ground with dung or leaves between the rows, to keep it moist, and the plants will need but little watering.

Plant the trees in grass orchards and pleasure-grounds, in preference to a garden that is annually cultivated. The finest of the fruit, when ripe, drops off, and if it falls on dug ground will be so much damaged, as to be unfit for use, as the earth will so adhere to the fruit, as to render the cleaning of it impracticable.

But if planted as before advised, the fruit can be picked up without receiving any injury. As the fruit is produced on the young or last year's wood, cut out only such branches as cross each other, and that are decayed or broken by accident. If, however, the tree should become crowded with wood, it will be necessary to thin it out in a regular manner, as the fruit will be larger and of better flavor where the trees are kept thin of wood.

J. W. RUSSELL.

Mount Auburn, Cambridge, Sept. 1840.

The above remarks by Mr. Russell, upon the cultivation of the black mulberry, are deserving of attention. Its fruit is much esteemed in Great Britain, and it has been cultivated in most all gardens of any great extent.

The black mulberry is one of the oldest fruits of which we have any record; it is mentioned in the Bible. It is a native

of Persia, where it now grows in great abundance, but the period of its introduction into Europe is unknown.

In England the fruit is eaten at the dessert; it is also an agreeable sweetmeat, but is not generally made use of for that purpose. A syrup is sometimes made of the fruit, which is considered excellent for sore throats, (*Duhamel*.) Besides these uses, all kinds of poultry eat the fruit with avidity.

The black mulberry may be introduced into cultivation to considerable advantage. In the place of many of the varieties of forest trees, which are planted either for mere ornament or for shade, and which possess no qualities as bearing eatable fruits, or leaves of any value, might be planted the black mulberry. It is a moderately sized, round-headed tree, of slow growth, late in putting out its leaves, but one of the first to ripen its fruit. The foliage is of a bright green, and, unlike almost every other tree, is never injured by insects; the leaves remaining clean and perfect until they fall from the tree after the early frosts of autumn. As shade trees, and for belts to plantations, and even in extensive grounds for ornament alone, the black mulberry may therefore be planted, and the quantity of agreeable fruit that it would annually produce, would form an item of no small amount.

Other kinds of mulberries produce fruit; but the black, from the richness of its color, hardness of the tree, and other qualities, render it the most desirable. The *Morus multicaulis* produces an excellent fruit; but as the trees, in the climate around Boston, lose most all of their smaller branches during the severity of the winters, unless they are protected, and most of their new wood retained, they will not produce fruit. But, as this tree is so valuable for another purpose, it will be cultivated for its abundant foliage, as food for the silk-worm, while the black mulberry will enrich our tables with its excellent fruit.—*Ed.*

ART. III. On grafting the *Acacia*. By the EDITOR.

A CORRESPONDENT of the *Gardener's Magazine*, in the August No., states that he has had good success in grafting the *acacia*. Struck with the sickly and puny appearance of many of the fine species, as the *vestita*, *diffusa*, *cyclops*, *pubescens*, *pulchella*, &c., when growing upon their own roots,

the idea was suggested to him of grafting them on strong stocks of *A. affinis*, this being the most rapid growing, as well as hardier than any other species: he states that he has known the latter to grow, out of doors, (from seed,) to the height of seventeen or twenty feet in three years!

His method of grafting is thus detailed:—By choosing a strong stock, and planting it out of doors in the early part of May, and then, as soon as it had taken root, grafting it, cutting it down to within a few eyes of each graft; or, if it can be conveniently done, inarching it, a fine tree would be formed in a very short time.

The scions may be put in of almost any size, even a large plant. Smaller plants may be grafted or inarched either in the stove or green-house. The plants that are grafted out of doors he recommends to be potted in autumn, in order to give them a little protection in winter; again planting them out in spring: and by continuing this system for two or three years, the grafts will become fairly established, when they may be left out all winter, with a good covering of mats in frosty weather.

This plan we would recommend to our amateur gardeners and nurserymen: one great objection to the *Acacia*, particularly the *dealbata*, *lophantha*, *decurrens*, &c., in the green-house, though splendid objects, is their rapid growth and large size: they cannot be kept within reasonable bounds: on the contrary, the *pubescens*, *vestita*, and some others, grow so slender and weak, that they can scarcely be considered as any ornament to a collection; but by grafting the latter on low stocks of the former, a healthy growth would be produced, and such plants would be numbered among the most interesting, in a good collection. Indeed, nothing can be more exquisite than some of the *acacias*, with their pendulous branches and tiny foliage, completely covered, some with their globular, and others with their plume-like, golden blossoms, and breathing a delicious odor.

What would be more lovely than a plant of the *A. pubescens*, grafted on a stock four feet high, its slender branches and delicately minute and pinnate foliage laden with its yellow flowers? Adopting this plan of grafting, will give the *Acacia* a claim upon the amateur cultivator, who possesses a small but rich collection, second to but few other plants. We hope that some of our amateur readers will try the plan, and give us an account of their success. The *A. lophantha* would make a good stock, and, as it may be so easily and abundantly raised from seed, it can be readily procured.

ART. IV. *Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines; with Remarks on the Cultivation of many of the species, and some Account of those which it would be desirable to introduce into our Gardens.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Floricultural Intelligence. New variegated Fuchsia.—In the September number of *Loudon's Magazine* we find an advertisement of a new variegated fuchsia. The variety which has thus sported is the *F. Thomsonia*. The leaves are stated to be "completely edged with white, and occasionally blotched." Mr. Appleby, the raiser of the variety, has grown it two seasons, and has proved that its variegated leaves will continue permanent. The appearance of the plant is very striking, half of every leaf being white, and not having a tendency to grow green. The plants are offered at 10s. 6d. each.

Fine new Pelargoniums.—The taste for this beautiful plant still continues to increase, and the zeal of cultivators to produce new sorts has by no means abated. The catalogues of the greatest geranium growers around London are filled with new and high priced plants, raised within a few years: like the dahlia, every season brings forward a great many new ones, but, like that flower, many of them are never sought after more than one season, and are soon lost among the multitude of old and inferior sorts.

We notice in the same *Magazine*, which we have just named, that five new seedling varieties are advertised: they are stated to have gained the silver Banksian medal, at the monthly show of the London Horticultural Society, at their garden at Chiswick, on the 13th of June, and the whole five are now offered at ten guineas, to be sent out in April next, (1841.) They

were raised by Mr. A. Pontey, Plymouth Nursery. The names and descriptions of the varieties are as follows:—

Pontey's Blushing Maid.—A very delicate blush ground, with fine crimson spot; a bright vermilion flame to the edges of the upper petals. A truly striking first-rate variety, with large showy trusses.

Pontey's Rival.—Dark rose ground, large, and of fine form; the upper petals covered with a beautiful crimson slab or splash. Altogether a first-rate variety.

Lyne's Peri of the West.—A beautiful blush, having a pretty light centre, and very dark splash, shaded off with scarlet, and covering nearly the whole of the upper petals; form and habit excellent.

Lyne's Picta Perfecta.—This flower is a deep peach-colored pink, the centre light, with a decided dark spot in the upper petals; the form and habit are very superior, and the ground color is remarkably vivid and striking.

Lyne's Queen of England.—A very delicate pink flower, with a beautiful pure white centre, reaching half way down the under petals, and breaking suddenly off, so as to be quite distinct from the ground color; the upper petals are partially covered by a splendid black splash, which shades gracefully off into the ground color; shape and growth very good.

Lötus jacobæus is one of the prettiest annuals lately introduced. Its neat and slender foliage, and very dark papilionaceous blossoms, in clusters of three or more, render it one of the greatest treasures of a select flower garden. To have it in perfection, however, the seeds should be sown in a pot in a hot-bed, and the plants afterwards potted off, and about the first of June turned out into the border in a warm situation, where it will display an abundance of its almost black velvety flowers, till late in autumn.—*Id.*

Verbenas.—Our correspondent, Mr. F. Briell, of Newark, N. J., has raised a great variety of new seedling verbenas, among which are two or three of great splendor. The finest one is, we believe, of the sparkling brilliancy of the old *chamædrifolia*, but the umbel of blossoms is much greater, the individual florets also larger, the habit robust and good, and the variety, as a whole, is said to be as fine a one as has been raised.

It gives us pleasure to see a plant to which we ourselves are so much attached, attracting the attention of cultivators generally. New varieties crowd upon us so fast, that we have barely time to notice a fine one before we hear of another still finer, and the production of beautiful ones is confined to no

particular spot. The vicinity of Baltimore, Philadelphia, New York, and Boston, have each produced seedlings of such merit as to almost eradicate some of the oldest and poorest, to make room for those of more recent date and of greater brilliancy.—*Ed.*

Splendid specimen of the Coxcomb.—Mr. James Sheridan, gardener to Col. A. H. Waters, of Millbury, Mass., has sent us one of the largest and finest specimens of the coxcomb that we have ever seen. It is very handsome in its form, nearly round, and with a very regular and even surface. The color is of the richest and deepest velvety crimson, and the specimen as densely compact as it is possible for it to grow; it measures upwards of *thirty inches* in circumference. With it we received the following note from Mr. Sheridan:—

“Sir—I send you a specimen of that fine annual the coxcomb, which, in truth, appears to me, when grown to perfection, to be the king, if not the queen, of annuals. The manner in which I raised it is very simple, and within the means of almost any lover of good flowers, viz:—The seeds were sown in a cucumber frame about the first of April, and when the plants were an inch high they were potted off into small pots; as soon as the pots were full of roots they were again shifted, and the same operation repeated as often as the pots were full of roots, until the first of July, when I turned them out of the pots, and planted them in the border in front of the green-house.—*I have the honor to be, &c., James Sheridan, gardener to Col. A. H. Waters, Millbury, Mass.*”

Mr. Sheridan has been very successful in his cultivation of the coxcomb. Last season he sent two fine specimens to the Massachusetts Horticultural Society's annual exhibition, but neither of them would compare with the one we have received from him, which is now before us. The coxcomb, ordinarily, is rather a mean flower, but when well grown, and in perfection, it is indeed one of the most showy annuals of which our gardens can boast. The late Mr. Knight, President of the London Horticultural Society, has detailed his manner of cultivating the coxcomb in the *Horticultural Society's Transactions*; but though attended with considerable nicety, and withall approaching towards quackery, he was not able to produce a much larger specimen than has been grown by Mr. Sheridan, under only common attention. We shall be glad to hear from Mr. Sheridan on the cultivation of any other plants.—*Ed.*

REVIEWS.

ART. I. *Third Report of the Agriculture of Massachusetts, on Wheat and Silk.* By HENRY COLMAN, Commissioner for the Agricultural Survey of the State. 8vo., 252 pages.

THE third report of the agriculture of Massachusetts appeared some time since, but we have not been able to find room for a notice of it, until the present moment. It is a more lengthy report than either of those which have preceded it, and, unlike those, does not contain the agricultural statistics of any particular county, but is devoted exclusively to the important subjects of the growth of wheat, and the manufacture of silk, throughout the State.

The cultivation of wheat has been but little attended to in Massachusetts. An opinion has been too generally entertained among agriculturists, that our land was not suitable to raise it to advantage, and that the superior fertility of the soil in New York and the West would produce so much larger crops with less manure and less labor, that they have almost given up its cultivation. With this state of feeling, the Legislature, in 1838, through the agricultural committee of the House, reported, that it was the policy of the State to award a bounty on the production of wheat, with a view to encourage its cultivation: an act for this object was eventually passed, and the result we have in the report before us.

The growth of the mulberry tree, and the production of silk, has been a question which has agitated the agricultural community for the past few years; information has been sought after, and many individuals have entered into the cultivation of the tree, and commenced feeding the worms. With the increase in price of the *Morus multicaulis*, the desire to procure information relative to the production of silk, became greater and greater. Books and pamphlets were written, and periodicals devoted to that one subject published; but with the fall in prices of the same tree, which took place last season, the interest previously manifested began to abate, and now the subject, though receiving the careful attention of some, has, as a general thing, lost a great portion of its interest: it was at the time that the *Morus multicaulis* was commanding a high price, and the public were seeking for information on the subject of the mulberry and silk, that Mr. Colman's report was commenced; and though, as we have remarked, there is but little call for the information which

it contains, compared with the eager desire a year since, yet the report is none the less valuable to the farmer.

Both the report on wheat and on silk exhibit considerable industry in the drawing up of all the details. Each subject is completely discussed, and nothing which would be of any benefit to the farmer has been omitted. In the report on the mulberry, every variety of the tree which has been introduced into the country has been noticed, and the peculiar qualities which have been attributed to each; and the report concludes with a table exhibiting the new system of rearing silk-worms of M. Camille Beauvais, which has lately attracted so much attention in France.

The report commences with a schedule of all the wheat returns for the bounty, offered by the State, in 1838-39. This report is set down by counties. Every town which made any return is named—the aggregate quantity of bushels of wheat raised—the number of acres sown—and remarks upon the season, loss of crop, and other information, are added. From this schedule it appears that the number of individual claimants for the bounty exceeded three thousand six hundred: the amount of bushels of wheat, on which a bounty has been paid, is more than one hundred and eight thousand, and the sum paid by the State, the first year of the law, nine thousand two hundred and eighty dollars and fourteen cents.

The commissioner prefaces his report upon wheat with his views upon the subject of the production of this important crop for the supply of this State, and enters into a discussion of the question, both as regards its moral and economical consideration; and we accord fully in the opinion of the author, that, with the climate and soil of Massachusetts, she should not be dependent on any other State for her bread. We cannot admit that we should give up the production of wheat, because our lands are less fertile than the rich prairies of the West, and turn our attention more to mechanics and manufactures, contented in supplying the products of the workshop to those who, in return, furnish us with the necessary comforts of life. This should not be—the land should be tilled, and, with good tillage, it can be rendered doubly fertile, and an ample crop secured, sufficient to give to the cultivator a reasonable profit, and at the same time enable him to supply the wants of the State with its own products. We are so pleased with the author's remarks, that we are induced to make a few extracts.

'The importance of the wheat crop to Massachusetts is very great. It is not necessary to go into any statistical returns of the number of pounds or barrels of wheat or wheat flour, which are brought from abroad, and annually consumed in the State. Every one must per-

ceive that the amount is enormous, since the consumption is universal, and the quantity produced in the State can do little towards supplying the demand. Public manners in this matter have undergone a considerable change within the last quarter of a century. Bread, made of rye and Indian meal, was then always to be found upon the tables in the country, and, in parts of the State, was almost exclusively used. Wheat flour was then comparatively a luxury. Now, brown bread, as it is termed, is almost banished from use. No farmer gets along without his superfine flour, his bolted wheat; and the poorest family are not satisfied, and will not be satisfied, without their wheat or flour bread. This general change in the habits of the people was nearly contemporaneous with the completion of the great Western Canal in New York, by which the abundant products of those rich wheat districts of country, which the canal opened, became accessible; and the supplies of their finest wheat and wheaten flour were brought directly to our doors, and carried, at the expense of a heavy freight, into every part of the interior of New England, even to distances of more than a hundred miles from the sea shore. The brands of the Rochester mills are almost as familiarly known on the upper waters of the Connecticut, as on the Hudson; and are found as constantly in the gorge of the White Mountains and the valleys of Vermont, as in the stores of New York and Albany. Indeed, wheat flour has become among us as much an article of first necessity as meat and clothing, and therefore, on grounds of sound political economy, it is matter of the highest consideration to supply, if practicable, our own wants.

This position has been strongly controverted. It has been maintained, that, instead of attempting to raise wheat, it would be better to apply ourselves to some branch of mechanical or manufacturing industry, which would give us the means of purchasing our bread from countries, whose climate and soil are more congenial than our own to its production. There is some plausibility, and a measure of truth in this position; but it cannot be admitted without material qualifications. The true prosperity either of an individual, a family, or a larger community, is not to be measured by any standard of dollars and cents. We know to what a great extent an opposite opinion has prevailed among us, and how disastrous its influence has proved upon our habits and morals. Severe experience, it is hoped, will disabuse us of this error; and we shall presently come to understand truths long since established, and which are of the highest practical moment, that the money which is not industriously earned is seldom wisely expended; and that the real prosperity of individuals and nations is not in the accumulation of mere wealth, but in those habits of industry, frugality, and self dependence, which spring from the necessity of labor and enterprise; and such a struggle with obstacles and difficulties, as will awaken, strengthen, and expand all our physical and intellectual energies. Temperance and frugality likewise lie at the foundation of all substantial prosperity; and neither the happiness nor the morals of men are safe, but where there exists an imperious necessity for the exercise of these virtues. Under such circumstances, it is clearly a principle of cardinal importance, in private and public economy, that individuals and communities should, as far as possible, depend upon themselves for the supply of their own wants; should seldom go abroad for that which they can produce without loss at home; and, in respect to matters of primary necessity, should endeavor, though it might seem at first to be attended with a pecuniary loss,

to create resources within themselves, rather than live in habits of dependence on others.

If we look at families, we shall find that those are, in truth, most prosperous, who rely most upon their own exertions, enterprise, and skill. While it often happens that persons possessed of large estates, which have come to them by inheritance, accident, or some fortunate speculation, and who, because they have never known the necessity, have never formed the habits of labor, in the inevitable vicissitudes of human affairs, are wrecked and reduced to a condition of dependence and beggary, the former have known neither want nor fear. Rich in habits of labor, temperance and frugality, of which, without their consent, no one can deprive them, they have rode out in safety the severest storms.

These principles, though they may seem remote, have a direct connection with the subject under consideration. The moral welfare of a community is always advanced by the necessity and the habits of self-dependence. As an agricultural community, especially, the people should, as far as possible, produce every article of first necessity, which they require for consumption. There may be products utterly unsuited to their soil and climate. It would be folly, where it is hopeless, to contend against nature. But in all cases, and always, where there is no obstacle absolutely insurmountable to persevering labor, success is always a moral gain.

In a pecuniary view, however, there can be no doubt that Massachusetts would find her account in producing her own bread from her own soil. Vast amounts of money are now sent out of the State for bread. This capital, applied to the cultivation and improvement of her soil, would immensely increase its productiveness. Mechanical labor, in general, terminates in the article produced. Labor, judiciously and liberally applied to agriculture, produces not merely the immediate and particular crop which is sought after, but has a cumulative influence in preparing the same land for other and larger products. The value of the land thus cultivated, is often doubled, quadrupled, and increased tenfold, by being thus rendered more productive.

It must be considered, likewise, that where a community depends upon exchange or barter, for the supply of its primary wants, as, for example, where it exchanges its manufactured articles, or the cash proceeds of these articles, for bread, this bread must be subjected to the charges of freight and commercial commissions, and to the support of a class of men, whose whole business consists in the transfer and exchange of these commodities. Now, without derogating at all from the respectability of this class of our fellow-citizens as a class, and from the usefulness and necessity of their agency, to a certain degree, wherever trade exists, yet it is plain that they are not a productive class, but that their support is itself a tax upon the labor and industry of the country. In an economical view, it is therefore desirable, that they should exist in no larger numbers than is necessary to transact the indispensable trade of the country; and it will be acknowledged that the country has already suffered much from the fact of large and disproportionate numbers having been withdrawn from the laborious and productive classes in rural life, to engage in the unproductive pursuits of trade, far beyond what the commerce or mercantile business of the country require.

* * * * *

Rural life in New-England, where every man may be a freeholder, tends to inspire and encourage an honest pride of character, and a

self-respect, which is a strong security to virtue. It is favorable to sobriety, industry, and an attachment to good order and quiet. It is exempt from those moral perils which exist in crowded villages; which are found in the concealment practicable in populous cities; in the indifference to the value of human life which prevails there; and especially in the corrupt associations and multiplied crimes and vices, which there inevitably abound. It is more favorable to the manly spirit of liberty, and to the sentiment of a moral and political equality, than where the extremes of human condition, enormous wealth and abject poverty, power and dependence, luxury and squalidness, pride and servility, are, as in cities, brought into constant and immediate connection.

Agriculture, in the view of every sound political economist, is the foundation of national wealth. It is not easy to see how trade or foreign commerce, legitimately pursued, contribute in any way to the actual increase of the wealth of a country, unless it be in the value of the labor employed when an equivalent is obtained from a foreign country for that labor. Agriculture creates wealth, and gathers its treasures without injury or diminution, from the exhaustless bounty of the Divine Providence in the earth and air. Every agricultural production is, therefore, a direct creation of so much additional wealth. This, however, is not all. It is not, as in manufactures, the mere using up of the raw material, but, under good cultivation, the soil itself is put in a condition to become more productive. The land is raised in value, in proportion to the increased income which can be obtained from it. Labor, thus applied, may be regarded as a sure and permanent investment of a productive capital. It is known, that, in many parts of the State, under a liberal and judicious husbandry, lands in a measure worthless, or valued at not more than five and ten dollars per acre, by improvements, the expense of which the first crops oftentimes fully repay, are made to yield an income equal to the interest on a capital of one and two hundred dollars per acre, and to pay, at the same time, the expenses of keeping them in a productive condition.

In considering the moral influences of agriculture, the consciousness of independence, resting upon the basis of a conscious ability to supply our own wants, is not to be overlooked as a sentiment in the highest degree favorable to good morals. This conviction calls out the best powers of our physical and intellectual nature. There is a rich pleasure, not unmingled with an honest pride, in eating bread raised by our own hands. There is a duty and a pleasure in encouraging domestic industry, under any and every form. The supplies of the products of foreign labor, come to us too often mingled with the painful associations of oppressed, defrauded, and unrequited toil. The products of our own honest industry and free labor are subject to none of these painful abatements. Massachusetts will find the true foundation of independence only in rendering her soil productive; as far as possible cutting off her reliance upon foreign supplies; and abating, or supplying, from her own resources and soil, those wants, which render her dependent upon a foreign power, for that which her own soil is capable of producing.

Above all things else, she should determine with honest pride to raise what she eats, or else, to eat what she raises. She can produce her own wheat. On new lands there is seldom any failure, unless one, which proceeds directly from neglect, or from atmospheric influences, which no sagacity can foresee or control, and which are pecu-

liar to no country. To accidents of this nature, all crops are liable. Wheat in general is, in all countries, considered a less hardy plant than many others; yet I have the settled opinion of at least six intelligent and practical farmers in the State, that, as far as their experience goes, (and it has been the experience in each of these cases of nearly a quarter of a century,) wheat with them is as certain as almost any crop which they cultivate. The returns will show, even under one of the most unfavorable years which we ever have, that many crops yielded twenty and twenty-five, not a few exceeded thirty, and some rose to forty bushels per acre.

The report on silk, which follows that on wheat, is so long, that it cannot be expected of us to offer many extracts. It commences with the history of the silk culture in the United States. Following this, the different varieties of mulberry in cultivation are enumerated, with remarks upon each. The whole number of varieties thus noticed is eight, and are as follows:—

Black Mulberry.

White Mulberry.

Brown Mulberry.

Alpine Mulberry.

Perottet Mulberry.

Morus Expansa Mulberry.

Canton Mulberry.

Sharpe's Seedling Mulberry.

The Canton Mulberry is a valuable kind, and we believe its merits are not yet fully appreciated: we have had some experience in the cultivation of this variety, and we can state that it is one of the most valuable kinds in the country. It is rapid in its growth, propagates freely by layers, and has a large and substantial leaf, nearly or quite equal in size to the *Morus multicaulis*. It is much hardier than the latter, and has endured our past winters, without injury to the main stem and roots.

The following remarks on this variety were furnished by our correspondent, Mr. Haggerston, gardener to J. P. Cushing, Esq. Mr. Cushing, with a commendable zeal, imported two thousand seedling trees, out of which only about five hundred lived. These, after they had been grown one or two years, were liberally distributed among nurserymen and others in the vicinity of Boston, and thus the trees have become very generally disseminated.

Many persons are inclined to believe that the Canton is not more hardy than the Perottet; Mr. Smith's experience leads to a different conclusion. I have also the pleasure to add here the actual experience of D. Haggerston, of Watertown, the farm manager of J. P. Cushing; and on whose knowledge and skill in the management of these plants as much reliance can be placed as on those of any man

in the country. His testimony, likewise, must be regarded as entirely disinterested.

He states, that with him the Perottet mulberry has been killed three winters out of five, root and branch, and two winters to the ground. The Canton trees on the same lot, with the same exposure, have stood the winter, having been killed not below a foot from the ground. He adds, likewise, that of some Canton, which were taken up the last fall, and the roots only covered, in other respects exposed to the weather, all are now (March, 1840,) wholly uninjured. The Canton trees which were not covered, have come out better than those which had some covering thrown over them, besides having their roots buried. Of the trees referred to in the first case, two hundred of the Canton were left exposed, and about twelve of the Perottet. Some of the Canton referred to were from seed imported from Canton; the remainder were part of the original importation of trees, of which I have before spoken. Upon weighing twenty leaves of the Canton and twenty of the Perottet, taken as nearly alike as possible, the difference in favor of the Canton was nearly an ounce. The Canton is as easily propagated as the Perottet, and as a plant nothing can be more beautiful. The leaf is large, lustrous, heart-shaped, and serrated: it is not pendant like the Perottet, and is not so thickly set on the tree as the Broussa.

Sharpe's mulberry is another new variety, originated in Connecticut. Much has been said respecting it in the papers, and if there have not been exaggerations, the tree is a most valuable one to the country. Of its merits we know nothing personally, but it is stated to be, by many individuals, all that has been said of it. The following account of it we copy from the report:—

Sharpe's variety.—I will in this place speak of a variety of the mulberry, which promises to afford what is much desired in Massachusetts; that is, a large leaf, suitable for the feed of the worms, and which also will endure the rigors of our winter. This is a tree which originated from seed imported from Canton, and planted in Belcher-town, Mass., ten years since. The original tree stood by the road side. The extraordinary character of the tree attracted the notice of Elias Sharpe, of Chaplin, Conn., who, by budding and engrafting, has considerably multiplied its product, and it is now designated as Sharpe's new variety. It produces a large and heavy leaf, heart-shaped—at least those which I have seen—and strong, and is relished by the worms. The leaf is nearly of an average size with the *Multi-caulis*. Its growth is most luxuriant, where I have seen it engrafted into the stocks of the white mulberry, many of the upright shoots the last autumn measuring from nine to eleven feet, and the side shoots six and seven feet in length. This was the growth of the summer. The tree, from the testimony of the original proprietors, though standing in a most exposed location, has never suffered from the winter; and within my own knowledge the last autumn, after a frost which destroyed the Perottet mulberry to the ground, the shoots of this tree were uninjured, even at the very points or tips. The specimens of reeled silk and of cocoons, which have been produced from the foliage of this variety, have been excellent. This tree appears to be an accidental variety; and, should the expectations which have been formed of it be to any considerable degree realized, it will prove

an acquisition of the most eminent importance and value to New England. It has been propagated hitherto only by budding or engrafting; and the plants which I saw at Chaplin, in Connecticut, had been engrafted into stocks of the white mulberry three or four years old.

In concluding the silk report, the commissioner refers to the importance of the introduction of the silk manufacture to the State. He also speaks of its applicability to various classes, and to individuals. He particularly recommends it to the attention of the clergy, to pauper establishments, to the Shakers, and to schools; he recommends it as a pursuit which may be followed with great advantage to each.

The following is the concluding paragraph, which is deserving the attention of every individual:—

I should do injustice to my own sense of grateful duty, if I did not call the attention of my readers to the miracles of Divine Providence in this wonderful animal, the silk-worm; at his entrance into life, among the smallest of living existences, which come within the cognizance of our senses; in six weeks, at farthest, completing his work; and by his humble and unobtrusive labors, contributing largely to the clothing of half mankind, and creating yearly millions and millions of wealth. It would be curious to calculate the hands he fills, the mouths he feeds, the wheels he sets in motion, the ships he loads, and the vast riches to which his annual labors amount. This reads a striking lesson to the reflecting mind, on the immense results which spring from regular and combined, though minute and often a disdained labor. Nor are his changes the less extraordinary or striking to the thoughtful mind. Nature is every where full of mysterious transformations, which show that the power of death has its limits, and indicate the wonderful progress of animated existence. Having accomplished his appointed task, he wraps himself in his silken shroud, and with him death is only a transient sleep. If left to himself, he soon emerges from his tomb, no longer a reptile, but a winged chrysalis, to enjoy another existence. In the curious transformations of this humble insect, man may see an instructive indication and testimony of the progress of being, and a proof that death is not annihilation. May we, as men, exult in the hopes, gathered from such beautiful examples in nature, and confirmed by divine revelation, that with man, also, death is only the threshold of life; and that for him to burst these cearments of the grave, is not like the silk-worm, to pass rapidly through another form of being, but to enter upon an immortality.

The appendix contains a great variety of useful information, relating to farming: our readers will probably think we have already devoted too much space to the report to make any further extracts. In conclusion, we must record our approbation of the manner in which the commissioner has executed his task, and we trust the great amount of facts, which he has gathered together, will effect a vast improvement in the agriculture of the State, and will particularly tend to introduce more generally the cultivation of the mulberry and the production of silk, from which the most valuable results will arise. It will de-

pend almost entirely upon the zeal of the New England States, whether the production of silk shall become a part of the agriculture of the country: they must become the pioneers in this great work; and we hope that the good example which they have always set, in stepping forward in every useful work, will not be lost in so important a branch of domestic industry as the manufacture of silk.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Influence of various circumstances in the growth of Plants in modifying their physiological action. Extracted from a paper by Dr. Christison, read before the Royal Society of Edinburgh, Feb. 3, 1840.

—"The author commenced with some remarks on the various causes by which the action of plants and of their products on the animal body may be modified, and on the great vagueness and uncertainty of the information at present possessed in regard to the influence of those causes which seem to arise in peculiar circumstances of vegetation, more especially climate, weather, soil, and the progress of vegetation. He then stated the sources of information on these points; namely, the curative or therapeutic action of drugs on man, their effects on the healthy function, both of man and animals, either as medicines or as poisons, their sensible qualities, and their chemical analysis; and he assigned reasons for discarding the first of these from the inquiry, and for trusting, in a great measure, to the criterions derived from sensible qualities, from the effects of poisons on the lower animals, and from chemical analysis.

"The remaining part of the present paper was confined chiefly to the influence of the progress of vegetation on the activity of plants. Doubts were thrown, by the results of his investigations, on most of the current doctrines on this head; but the present state of the inquiry did not lead to any general inferences being drawn with confidence.

"An extended statement was made upon the influence of the progress of vegetation upon many of the active species of the natural family Ranunculaceæ. It was stated, that in the acrid species of the genera *Ranunculus*, *Anemone* and *Clematis*, the acidity, which is the same throughout them all in quality, is possessed in nearly equal activity by the leaves, from an early period in the spring until they are about to decay; but that it exists in the germens only while they are green, and disappears there entirely as the seeds ripen. In the acrid species of *Aconitum*, the acidity of the leaves, on the contrary, continues only until the seeds begin to form, and then gradually, but quickly, disappears as they ripen, while the seeds acquire precisely the same peculiar kind of acidity. The narcotic properties of the leaves, however, do not undergo the same singular change, but continue undiminished after the seeds are mostly ripe, and probably, in-

deed, as long as the leaves themselves retain their freshness. The acidity of the genus *Helleborus* is probably governed by circumstances different from any of those already mentioned; but the experiments already made are insufficient to point out the true rule. In the course of these observations many remarks were also made on the nature of the acidity possessed by the different species, upon which incorrect ideas at present very generally prevail; several material corrections were also suggested as to the general opinions respecting the influence of heat, desiccation and time upon their acidity; and a short allusion was made to the properties of a remarkably crystalline principle, which the author discovered in one of the species of *Ranunculus*, and which appeared to him to be the ingredient upon which the activity of that genus depends.

"The author next entered into some details regarding the influence of the progress of vegetation on narcotic plants, and commenced with the natural family *Amygdalæ*, the leaves of several of which are eminently poisonous, in consequence of containing, or producing when bruised, a hydrocyanated essential oil. He showed that this oil abounds most in the leaves of the cherry laurel (*Cerasus Lauro-cerarus*,) when they are young and undeveloped; and that it goes on diminishing gradually in proportion to their weight, as they increase in age and vigor, until the commencement of their second season, when the old leaves, though plump and luxuriant, do not contain above an eighth or tenth of what they contained in the infant state, or of what is contained in the young undeveloped leaves of the same period. This is a complete reversal of the generally admitted law, in respect of the formation of volatile oils in leaves.

"The consideration of this fact led to some statements upon the mode and form in which some essential oils and other active principles exist in the leaves of plants; and the conclusion was drawn, that in all probability many active principles, which are separated from plants by simple processes, do not exist ready formed in the leaves; but, as in the familiar case of the mustard seed and bitter almond, are only developed when the structure of the leaves is broken up, and principles of a different kind, secreted in distinct cells, are brought in contact with one another or with water.

"The remaining departments of the investigation were postponed; but further observations were promised upon the influence of the progress of vegetation on the solanaceous and umbelliferous plants, and likewise on the effects of soil and climate."

From the above extract it may be gathered why cattle reject the *Ranunculus acris*, or common buttercup of the meadow, while green, but do not object to it, but are even said to be fond of it, in a state of hay.—*Gard. Mag.*

Temperature of Plants.—M. Dutrochet, some years ago, proved by experiment that living plants have a proper heat; and other experiments have recently been made by M. Van Beck, and read to the French Academy in January last, confirming the fact. The maximum of inherent heat which M. Van Beck found, on September 29th, an hour and a quarter after noon, in a young leaf of *Sedum Cotyledon*, was about 0 25° centigrade, or about something more than half a degree of Fahrenheit. In rainy and dull days the heat was not so great as when the weather was calm and clear. The following observations are interesting, as tending to show the probable advantages of a free circulation of the air among plants; though, as the writer observes, the subject requires to be further examined.

"A singular phenomenon, which I have always observed in the course of my experiments, is, that, on suddenly raising the bell-glass, which cut off all communication between the air of the apartment and that of the plant, the heat of the latter always rose suddenly some tenths of a degree. This phenomenon, however, lasted only a few minutes; the magnetic needle soon retrograded, passing zero of the scale, and showing, by its opposite and permanent deviation, that the living plant had a much lower temperature than the dead leaf, as is always the case in the atmosphere.

"Is this phenomenon to be ascribed to the instantaneous access of the free air to the plant, which, by stimulating its vital functions, which were depressed by its having been kept in a less pure air, augments at the same time its proper heat, *before the counteracting and frigorific influence of re-established evaporation has had time to make itself felt?*

"This I cannot venture to decide; but I hope that other philosophers and naturalists will engage in these researches, which, if I am not deceived, may yet throw light on many an interesting question in vegetable physiology." (*Compte Rendu, &c.*, as quoted in *Jam. Jour.* for April, 1840, p. 333.)

Improving soils by pulverization.—The fertility of adhesive soils becomes greatly increased by frequently exposing them to the atmosphere, by which means they become so much pulverized, as to encourage the growth of the fibres of plants. One cause of the unproductiveness of adhesive soils is, that air cannot penetrate to the seeds or roots of plants; preventing the germination of the former, and the future well-being of the other. In such cases, the roots of plants can receive no advantage from the carbonaceous matter which exists in the atmosphere, from the decomposition of animal and vegetable substances on the earth's surface. Another cause of unproductiveness is, that such soils cannot retain a sufficient quantity of moisture, but are saturated upon the surface at one time, and burnt as hard as a brick at another.

In the former case, the fibres of plants are generally rotted, whilst in the latter they are torn in pieces by the cracks in the ground. The moisture will neither sink freely, nor rise freely, when the sun has evaporated the moisture on the surface. Again, in such soils the full advantage of manure cannot be realized, as it must be within the reach of the atmosphere before those changes can be effected, by which alone it can become the nourishment of plants. Hence the importance of trenching, ridging, and frequent digging, by which a large portion of the soil is exposed to the atmosphere, and rendered more friable and open in its texture. These operations may be performed as soon as the ground is clean. The depth will depend upon the nature of the soil and subsoil: strong soils can scarcely be dug or trenched too deep; nor indeed can any soil, unless the subsoil contains something noxious to vegetation.

Pulverization ought to go on during the process of vegetation, by the free use of the fork or hoe. In summer such operations prevent the soil getting dried up, as evaporation proceeds more rapidly from a hard surface than a loose one. It is some time before water can penetrate a hard surface; upon a loose one it sinks to the roots at once. The more soil is stirred among crops of any description, the more fibres will plants produce, and this increase of strength to the plants will more than pay the labor. Independent of the neat and orderly appearance of the drill system among culinary vegetables, it

possesses the advantage of enabling us freely to stir the soil; for this purpose I consider a three-pronged fork preferable to a hoe, as by using the latter the ground gets hard below. Believing pulverization to be of great importance for loosening the texture of strong soils, enabling the fibres of plants to run in all directions in search of food, imbibing and imparting a sufficiency of moisture, without receiving too much, or retaining it too long, and also as tending to eradicate deleterious properties in the soil, I should wish to see it more generally adopted, and extended to the cultivation of many of our field crops.—(*Gard. Mag.*)

ART. II. Domestic Notices.

Cultivation of the Grape and Peach under glass, without artificial heat.—I am making some experiments upon the cultivation of the grape and peach. You will oblige me, and no doubt many of your subscribers, if you will give your views of the best culture of the grape under glass, *without* artificial heat, and in the open air; also, the best method of pruning; also, the peach with its varieties, and the soil best adapted to them, and the best method of pruning.—*Yours, respectfully, J. R. Rhineland, Huntington, L. I., Sept. 1840.* [We hope that some of our able correspondents will answer Mr. Rhineland's queries, and give him the results of their experience. Perhaps Mr. Russell or Mr. Haggerston, who have had much experience in the cultivation of the grape and peach, can give the desired information, as they have each had the management of extensive vineries, both *with* and *without* heat. We shall be happy to hear from them on the subject.—*Ed.*]

Dr. Wray, of Augusta, Ga., whose garden suffered much from the great freshet in May last, is now making a delightful country residence at the Sand Hills, a few miles out from the city, and is giving his attention mostly to fine fruits.—*M. A. W., Athens, Ga.*

The season in Athens, Ga.—The weather of this year, hitherto, is without precedent in the history of Georgia, and vegetation presents corresponding anomalies. Not less than six feet of water has fallen since the first of April, and only once until last week has there been three consecutive days without rain, and often ten with more or less. At the time of the great freshet, (26th May,) not less than eighteen inches fell in forty-eight hours, and twice since about twelve inches fell in twenty-four hours; the remainder in what would be called genial showers, sometimes pouring steadily all night, but generally only for a few hours at a time, and without violent winds. In the main, the whole period might be compared to the best kind of April weather. The heat temperate, only twice rising to full ninety degrees, and though unfavorable for some kinds of fruits, yet for mere vegetation uncommonly propitious. I have grafts set in March, of cherries, plums and pears, (some even on quince stocks,) which have made a growth of from five to seven feet, and are still going ahead at a great rate. Many plants have taken the second growth and again flowered, such as the Dwarf almond, *Wistaria Consequana*, *Amorpha*

fruticôsa, strawberry, Gelseminum nitidum, Magnolia purpurea. M. Yulan has a few buds about to open, and the Japan quince has not been without flowers since last February. It is also loaded with fruit in clusters, with long beaks like hazel nuts. Sternbergia lutea, which commonly sends up naked flowers in October, sent up both leaves and flowers ten days ago. Oxalis Bowies, which was out all winter, flowered finely in the spring, then lay dormant, but lately has started again and greatly increased, and presents a most magnificent clump, with very strong scapes and large flowers.—M. A. W., Athens, Ga., Sept., 1840.

A white species of the Thunbergia.—You speak of a white variety of Thunbergia alata. I have a white Thunbergia raised from seeds, presented me by Mr. Charles Lawrence, of Salem, who brought them from St. Croix, which seems to be a perfectly distinct species; perennial, with quite a different leaf; the petioles not alated at all; the flowers also differently shaped, and of a dazzling whiteness; habit climbing, like the other, but not so vigorous. It is now about six feet high, while the other near it is fully ten feet, with its laterals scrambling over every thing far and wide.—Id.

Dahlias in Georgia.—The dahlias received from Hovey & Co. last spring have answered my most sanguine expectations. Striata formosissima deserves all that has been said of it—*distinctly* striped and picoteed, and, moreover, a free bloomer; one branch, for a freak, has only perfectly self-colored flowers, of a fine size and form, and a rich crimson. Mrs. Rushton, Contender, and Sir Henry Fletcher were and are superb; Gem, very fine: Conqueror of Europe, good, but scarcely deserving so great a name; the Star of Buckland, the only one among them that was quite worthless, not worth its garden room. The seeds of annuals, sent also, succeeded exceedingly well, owing to the remarkably favorable season; but few of them, however, have ripened any seeds. I have one dahlia, I know not what, but think it a buff-colored one, received from Thorburn some years ago, which measures now eleven feet high, and without the least sign of a flower-bud upon it.—Id.

The Columbian Horticultural Society, Washington, D. C., held its annual exhibition on the 29th September. We are promised an account of it from our correspondent, J. F. Callan, Esq.—Ed.

The Middlesex Horticultural Society, Lowell, Mass., held its annual exhibition on the 10th September, and an account of the flowers and fruits exhibited, will appear in the December number.—Id.

The Annual Exhibition of the Natural History Society, Salem, Mass., was held on the 24th of September. An account of it will also appear with the above in the December number.—Id.

Errata.—One or two errors occurred in our last, which should be corrected as follows:—P. 338, twelve lines from the bottom, for "Gen. Mason" read "Gen. Nelson." The name of our correspondent, Dr. Gunnell, which in p. 337 and 338 reads "J. L. Gunnell," should be "J. S. Gunnell." In Prof. Russell's communication some vexing errors also occurred, viz:—P. 333, nineteenth line from the top, for "milk" read "mink;" and same page, eighth line from the bottom, for "Warren" read "Warner;" the same error also occurs on p. 335, seventh line from the bottom; p. 335, sixth line from the top, for "Grophina" read "Gyrophora."

ART. III. *Massachusetts Horticultural Society.*

August 22d.—An adjourned meeting—the President in the chair. The Recording Secretary being absent, William Oliver, Esq. was appointed Secretary pro tem.

N. J. Becar, Esq., of New York, was admitted a corresponding member of the Society.

Capt. F. W. Macondry was admitted a subscription member. Meeting adjourned.

Aug. 29th.—An adjourned meeting—but there being no business, it was dissolved.

In our last we presented part of the report of this meeting—that of the flowers exhibited. We now present a report of the fruits.

Exhibited. Fruits:—From E. M. Richards, Williams's Favorite, red Juneating, Summer pearmain apples; also Belle de Beaucare and seedling peaches, both handsome specimens. From the President, Alberge and Gross Mignonne peaches (fine,) and large red sweeting apple. From S. Downer, Gross Mignonne and Coolidge's Favorite peaches. From W. Oliver, Gross Mignonne and Coolidge's Favorite peaches. From T. Hittinger, Charlestown, very beautiful nectarines. From Mrs. T. Bigelow, Freestone peaches.

From R. Manning, Summer Rose, Beurré of Mons, Doyenne d'Ete and Julienne pears; also, Dominie Diel plums, and Cholomon-ski and Duchess of Oldenburgh apples, the latter a beautiful new variety, which we have previously noticed, (p. 125.) From S. Pond, fine specimens of Cushing and Julienne pears, and Isabella, Lombard and Smith's Orleans plums. From T. Hastings, very superior Coolidge's Favorite peaches. From J. Fisher, Brookline, pears, name unknown. From Mr. Skilton, white Gage plums. From J. L. L. F. Warren, rareripe, Teton de Venus, and George IV. peaches; also, Imperial Gage (?) and Reine Claude (?) plums.

Vegetables:—From Mrs. T. Bigelow, mandrakes or striped gourds. From J. Hovey, tomatoes. From the President, very fine Lima beans. From E. M. Richards, large and fine egg plants. From J. A. Kenrick, tomatoes.

Sept. 5th.—A stated meeting of the Society was held this day—the President in the chair. No business coming before the meeting, it was adjourned for one week.

Exhibited. Flowers:—Bouquets from J. Hovey. Dahlias, from J. L. L. F. Warren.

Sept. 9th, 10th and 11th.—*The twelfth annual exhibition of the Society* was held on Wednesday, Thursday and Friday, the 9th, 10th and 11th of September, according to previous notice, at the Society's room, No. 25 Tremont Row. The committee to whom was entrusted the duty of decorating the room and completing the arrangements, executed their task with much taste.

The Society's room is not large enough, nor sufficiently lofty, to make a grand display; and, considering the limited space, the committee completed their arrangements with good effect, and with what we think a very decided improvement upon the last exhibition. In the centre of the room, over the large oval fruit table, was thrown two arches, the bases of which rested upon the two ends and upon the middle of the table. These arches were composed of lattice

work, so as to have a light appearance, and were beautifully wreathed with evergreens, roses, splendid dahlias, asters, &c., and presented an elegant appearance. The two opposite corners of the room, from the entrance door, were fitted up with alcoves, also of lattice-work, three in each corner, the middle one in each considerably larger than the other two. These alcoves were the receptacles of some of the most splendid bouquets which ever graced the room. They were backed by evergreens, and in front festooned by a variety of brilliant flowers, which rendered them objects of great interest, and added much to the *coup d'œil* which struck the eye upon entering the room. The cornices of the room were also beautifully festooned, which contributed in no small degree to the display.

On the tables on each side of the room were arranged collections of plants, many of them fine specimens. The *Chamærops humilis*, with its pendent fan-like foliage—the Sago palm—the thick and fleshy foliage of the India-rubber tree, (*Ficus elástica*,)—the myrtle-like blossoms of the tall and graceful *Eugenia*—the noble leaf of the Banana, intermixed with the grotesque forms of the *Cacti*,—contributed to make up a fine display. On one side of the room the plants formed a deep and rich back-ground to the mass of splendid blooms of the dahlia which filled the stands the whole length, and the dark foliage, contrasting with the rainbow hues of this flower, heightened and set off their appearance with great effect.

The weather, with the exception of a single shower, was delightful during the week, and from the great number of strangers who were in the city, the room was crowded with visitors, all of whom seemed to be highly gratified with the display. The fruit, which has been abundant and handsome this year, was much admired, and the great variety of specimens surprised many of the visitors. On the whole, we think the exhibition was well got up, and the members deserve great credit for the promptness with which they rendered their assistance.

The Committee of Arrangements dined together, as usual, at the Exchange Coffee-House, on Friday, the 11th, and the occasion was one of pleasantness and good feeling—all seemed united and animated with much zeal in the cause of floriculture and horticulture.

We had prepared these few remarks, when we accidentally had the pleasure of reading part of the official report of Mr. Walker, the Chairman of the Committee of Arrangements, and we were so pleased with it, that, with his consent, we present it in connection with ours:—

“By a vote of the Massachusetts Horticultural Society, it has fallen to our lot to prepare a report of the annual exhibition. In the performance of this duty, if we were to follow the impulse of our own feelings, we should probably say too much in praise of our first love, the productions of *Flora*, and let our imagination run riot in an attempt to describe the beauties of the many fair specimens presented for our admiration: but we are reminded by *Pomona* that her offerings have a claim upon our special notice, and we should prove recreant to our trust, were we to omit giving, at least, a passing notice of some of the fine varieties of fruits which crowded our tables, and added so much to the gratification of our visitors. There was the grape, with its luscious juice, apparently ready to burst the blooming covering which contained that ‘that maketh the heart glad’—the Bartlett pear, which seemed to say, ‘come taste me and try me, I have but few equals, and no superiors’—the Gravenstein apple was a temp-

tation which almost set our injunction of 'touch not' at defiance—the plums, encircled with imperial purple, and with 'flavor rich beyond compare'—peaches, with colors various, and with qualities beyond the pale of our description;—all these our readers will perceive, (by a reference to the report of the Chairman of the Fruit Committee,) made but a part of the great whole.

"Who of all the lovers of *Flora* could behold the various specimens of flowers, from the gorgeous *Gloriosa superba* to the humble *Viola tricolor*, and not have his, or her, better feelings roused into action—his thoughts raised to admire—his heart warmed with love, and his soul to burn with ecstatic desire to know more of the works of Him, who made them all,—who formed them with graces and tinted them with colors so diversified, and scattered them with liberal hand wherever man is found?

"With these few preliminary remarks, we shall now proceed to give a detailed account of the exhibition, which commenced on Wednesday, the 9th instant, at noon, and closed on Friday, 11th instant, at nine o'clock, P. M. During that period the hall was visited by many distinguished strangers from various parts of the Union, who had assembled in our city to join the whig convention at Bunker Hill. It was gratifying to the Committee of Arrangements to learn from these gentlemen, that an increasing interest in the pursuit of horticulture is now manifest in various parts of our country. We rejoice to know this, as we consider that horticulture is like virtue, the more it is practised, the more lovely it will appear; and it may be said of it, as of virtue, 'its ways are ways of pleasantness, and all its paths are paths of peace.'"

The following is an account of the plants exhibited:—

Plants:—From J. P. Cushing, Esq., *Latania borbonica*, *Phœnix dactylifera*, *Cycas revoluta*, *Chamærops humilis*, *Thëa viridis*, *Begonia* sp., *Photinia arbutifolia*, &c. From Messrs. Winship, *Eugenia australis*, *Erica spuria*, *Buxus arborescens*, *Begonia argyrostigma*, *Musa rosacea*, *Ardisia colorata*, *Acacia* sp., *Eriobotrya japonica*, *Ficus elastica*, *Fuchsia coccinea*, *Eucomis vittata*, *Vallota purpurea*, *Cereus speciosissimus*, *Opuntia brasiliensis*, *Cereus cylindricus*, *Campánula pyramidalis*, *Melaleuca diosmæfolia*, *heliotropes*, *verbenas*, *roses*, *geraniums*, *Tradescantia discolor*, *Funkia japonica*, *Finca rosea*, *Belladonna lily*, *Amaryllis Josephine* (in flower,) and other plants, to the number of upwards of forty; also, branches of the *Shepherdia argentea*, full of fruit.

From W. E. Carter, Botanic Garden, *Tecoma capensis*, *Magnolia grandiflora*, *Cratægus glabra*, *Beaufortia decussata*, *Rhododendron arboreum*, *Illicium floridanum*, *Hækea gibbosa*, *Röchea falcata*, *Laurus excelsa*, *Taxus chinensis*, *Callistemon saligna*, *Lidëtris latifolia*, *Vallota purpurea*, *Nandina domestica*, *Dracæna fragrans*, *Hibiscus Manihot*, *Eriobotrya japonica*, *Melaleuca*, *daphnes*, *acacias*, *fuchsias*, *ericas*, *diosmas*, *myrtles*, *petunias*, *azaleas*, &c., in all upwards of sixty plants; also, a fine cut specimen of *Hedychium Gardnerianum*. From W. Meller, *Hoya carnosa*, *Fuchsia tenella* and *globosa*, *Citrus myrtifolia*, *Plumbago capensis*, *Diosma ericoides*, *Gloxinia speciosa*, *Eugenia australis*, *Thuja orientalis*, *Lauristinus*, *heliotropes*, &c.

From Capt. Sumner, Boston, two Chinese plants, remarkable curiosities, and which attracted, and deservedly so, universal attention. They illustrated fully the Chinese system of gardening, presenting a garden in miniature. From J. L. L. F. Warren, variegated holly,

common holly, silver-edged Box, *Stapelia* sp., *Eugenia australis*, *Fuchsia gracilis*, *Erica concinna*, roses, rosemary, &c. &c.

Cut Flowers:—From E. H. Derby, Salem, *Amaryllis Belladonna*, do. var.? *Oxalis* sp.? and *Nymphaea odorata*. From John Lewis Russell, a fine bouquet, composed of the following native plants:—*Liatris scariosa*, *Gentiana crinita*, *Neottia spiralis*, and *Polygonum articulatum*. A magnificent specimen of *Gloriosa superba*, from Madam Lowell, Roxbury, attracted great admiration. From S. Walker, fine pansies, and specimens of *Tigridia conchiflora*. From W. Kenrick, roses in variety. From D. Haggerston, a collection of several varieties of verbenas. Noisette roses, very fine, from S. R. Johnson. A bunch of superb German asters, from Mr. Arnold, Cambridgeport. German asters, from Josiah Stickney, Esq. Asters from J. A. Kenrick and S. Sweetser. Verbenas, from J. Breck & Co.

From Hovey & Co., a collection of superb verbenas, including the following twenty species and varieties, many of them new and very splendid, viz:—*Verbena chamædrifolia*, *Arraniæna*, *Tweediana*, and *T. superba*, *Eyredæna*, *teucroides*, *incisa*, *Binneyana*, *fulgens*, *Wales's* seedling, *Winchesteriæ*, *Russelliæ*, *Colcordiæ*, *Péppers*, *ignescens*, *Hirstiæ*, *Richardsoniæ*, *Powellii*, *speciosa* and *venosa*. Hovey & Co. sent a collection of ten varieties of most superb double balsams, viz: rose, purple, scarlet, white, mottled, scarlet spotted, crimson spotted, purple spotted, striped, and ruby colored. Messrs. Winships sent a basket of *Passiflora quadrangulæris*.

Dahlias:—From Josiah Stickney, Ansell's Unique, Horsham Rival, Ingham's Canute, Rienzi, *Sulphurea elegans*, Essex Rival, Clark's Julia, Virgin Queen, *Striata formosissima*, Stanford's Contender, Rosa superba, Grand purple, Marshal Sout, Fire-ball, Ne Plus Ultra, Elphinstone's Coronation, Corinne, Reliance, Climax, Eva, Red Rover, &c. From P. Barnes, Suffolk Hero, Unique, Clio Perfecta, Quilled Perfection, Coronation, Middlesex Rival, Sunbury Hero, Beauty of the North, Conqueror of Europe, Metropolitan Perfection, *Striata formosissima*, Red Rover, &c. &c.

From Hovey & Co., Marshal Sout, Horticulturalist, *Striata formosissima*, Horatio, Beauty of the North, Mrs. Rushton, Stone's Yellow Perfection, Gen. Washington, Reliance, Mrs. Cox, Red Rover, Glory, Reliance, *Sulphurea elegans*, Splendissima, Independent, Duchess of Richmond, Sir Henry Fletcher, Rosetta, Unique, Lord Liverpool, Eva, Quilled Perfection, Princess Victoria, Blandina, &c. From J. A. Kenrick, Duchess of Richmond, Ne Plus Ultra, Rival Yellow, &c.

From M. P. Wilder, Mrs. Rushton, Unique, *Striata formosissima*, Ne Plus Ultra, Beauty of the Plain, Red Rover, Ovid, Advancer, Henry Fletcher, Castanda, Duchess of Richmond, Eva, Iver Hero, Flora Hastings, Contender (Stanford's,) Horticulturalist, Bonny Jean, Lewisham Rival, Clio Perfecta, Girling's Heroine, &c. &c. From D. McIntyre, Eva, Premier, Miss Johnson, Duke of Kent, *Striata formosissima*, Lord Liverpool, Marshal Sout, Bontisholl, Suffolk Hero, Mrs. Broadwood, Countess of Liverpool, Castanda, &c. &c.

From D. Haggerston, Eva, Beauty of Kingscote, Princess Victoria, *Striata formosissima*, Marshal Sout, Unique, Metropolitan Calypso, Angelina, Splendissima, Clio Perfecta, Dennisii, Red Rover, Lady William Powllett, Gen. Washington, Beauty of the North, &c. From Joseph Breck & Co., *Striata formosissima*, Angelina, Duchess of Richmond, Unique, Rival Sussex, Dennisii, Globe, Countess of Liv-

erpool, Metropolitan Calypso, Paragon, &c. From R. Howe, Mrs. Rushton, Desdemona, Dennisii, Madonna, Suffolk Hero, Angelina, Red Rover, Countess of Liverpool, &c.

From S. Walker, Mrs. Rushton, Eva, Marshal Soult, Striata formosissima, Desdemona, Horsham Rival, Unique, Princess Victoria, Ne Plus Ultra, Diana, Victory, Napoleon, Lady Webster, Lady Dartmouth, Lilac Perfection, Sulphurea elegans, Suffolk Hero, Beauty of West Riding, &c. From W. E. Carter, Striata formosissima, Mrs. Rushton, Glory, Quilled Perfection, Countess of Liverpool, Dennisii, Rival Sussex, Unique, Metropolitan Calypso, &c. From J. L. L. F. Warren, dahlias of several kinds. Dahlias were also furnished for the wreaths and decorations, by most of the cultivators.

Bouquets:—A superb bouquet, for one of the large alcoves, was contributed by Messrs. Hovey & Co. From Messrs. Winship, smaller bouquets. From W. E. Carter, bouquets; the two latter filled the smaller alcoves in one corner of the room. Mr. Walker contributed the large and two smaller ones which filled the three alcoves in the opposite corner. Besides these, bouquets were sent by R. Howe, W. Kenrick, John Hovey, W. Meller, J. A. Kenrick, &c.

Fruits:—The exhibition of fruits was remarkably fine, and the variety of specimens very numerous: the number of contributors did not appear to be so large as usual, but a greater assortment was exhibited, by the more extensive cultivators, than usual. It is almost impossible to particularize among such a variety of excellent fruit those kinds which appeared to be of the greatest merit; our report will show the names of the kinds sent by each contributor. Mr. Manning, as usual, presented a great variety of pears, and among the number we noticed several which have not fruited previous to the present season, in this country, and some of them were taken from trees grafted with scions sent to Mr. Manning, by that great pomologist and originator of new pears, Dr. Van Mons, of Belgium. Of the qualities of these new fruits Mr. Manning will probably send us an account in season for our Pomological Notices, in the early part of our next volume. Mr. Wilder exhibited a great variety of pears, and many of the specimens were very large and fine. Mr. Pond, also, made a fine show; some Dix pears among his fruit, were decidedly the largest that we have ever seen. E. Phinney, B. V. French, and J. M. Ives contributed a great variety. Mr. Haggerston's grapes, as usual, were of excellent quality, probably superior to any in the vicinity of Boston: and Mr. Cowan's peaches and nectarines were of surpassing size and beauty. Such a display, we venture to say, could not be made any where else in the Union.

From Mr. Vose, the President of the Society, Napoleon, Petre, Williams's Bon Chrétien, Long green, Winter Warden, Cushing, King of Wurtemberg, Lewis and Urbaniste pears; Hawthorndean, (beautiful,) Lady Haley's Nonsuch, and large red Sweeting apples; green Flesh, Cantelope, Minorca, and Nutmeg melons, all very fine specimens. From Richard Ward, Roxbury, Williams's Bon Chrétien, Seckel, and Andrews pears; and several varieties of peaches. From T. W. Lamb, Newton, Williams's Bon Chrétien pears; and several sorts of apples and quinces.

From R. Manning, the following assortment of pears:—Althorp Crasanne, Flemish Beauty, Bon Chrétien Turk, Héricart, Jutte or Buit, and Wredon; these six were now exhibited for the first time; Beurré Bosc, Buffum, Beurré von Marum, Belle Lucrative, Beurré Bronze, Bishop's Thumb, Cushing, Bezi de la Motte, Cabot, (a fine

pear,) Bezi Chaumontel, Beurré Duval, Foster's St. Michael, Fulton, Harvard, Bergamotte d' Automne, Golden Beurré of Bilboa, Huguenot, Hacon's Incomparable, Valeé Franche, Jalousie, King Edward, Long Green, Petre, Pope's Russett, Ronville, King of Wurtemberg, Williams's Melting, Surpasse Virgoulouse, Naumkeag, Winter Nelis, Urbaniste, Garnons, green pear of Yair, Fondante du Bois, Louis Bon Real, Forme de Delices, Alpha, and Dearborn's seedling, in all forty-four varieties; the specimens were very handsome: also the following apples;—Emperor Alexander, Fall Harvey, Gravenstein, Murphy, red Crab, Swaar, Ribstone pippin, Beauty of the West, and Victorious Rennette.

From M. P. Wilder, a fine collection of pears, viz:—Bon Chrétien Fondante, Williams's Bon Chrétien, King of Wurtemberg, Beurré Broude, Fulton, Easter Beurré, Dix, Surpasse Virgoulouse, Louis Bonne of Jersey, Napoleon, Cumberland, Cushing, Prince's St. Germain, Duchess d'Angoulême, Heathcot, Urbaniste, Belle et Bonne, Belle Lucrative, Raymond, Rouse Lench, Wilkinson, Seckel, Thompson, Queen Catharine, Garnons, Glout Morceau, Belmont, Bleeker's Meadow, Fourcroy, Summer Thorn, Bouvier, Fondante du Bois, Seckel on the quince, Forelle, Whitfield, Beurré Diel, Passe Colmar, of the first and second crops, the latter on new wood, Chaumontel, Burgomaster, Iron, Catillac, Beurré d'Arenberg, French, (without name,) and the Columbian Virgoulouse; the specimens of the latter were remarkably large and fair, and we doubt not that it will prove a most valuable variety; all Mr. Wilder's specimens were handsome, and of good size.

From J. P. Cushing, Esq., by Mr. Haggerston, fine grapes of the following varieties:—Black Hamburg, Black Maroc, White Sweetwater, St. Peters, Grizzly Frontignac, Syrian, Black Morocco, white Frontignac, and Muscat of Alexandria. From Perrin May, Boston, beautiful brown Beurré and Bon Chrétien pears. From A. D. Capen, Dorchester, Seckel pears. From J. Gardener, Dorchester, Gravenstein apples. From Cheever Newhall, Napoleon, St. Michael, Wilkinson, Urbaniste, Dix, King of Wurtemberg, Williams's Bon Chrétien, Bleeker's Meadow, Knight's Seedling, (?) and Harrison (?) pears; Porter and Gravenstein apples, and native black grapes. From Messrs. Winship, Andrews, King of Wurtemberg, and Capiaumont pears, and Gravenstein apples.

From S. Pond, pears, viz:—Passe Colmar, St. Ghislain, Napoleon, Andrews, Surpasse Virgoulouse, Dix, (very large,) Julienne, Duchess d'Angoulême, Wilkinson, Easter Beurré (superior,) Williams's Bon Chrétien, Beurré Diel, and Cushing; also, Semiana (?) Lombard, Diamond, and Pond's seedling (?) plums, the whole remarkably fine. From J. Heard, Watertown, fine Broca's Bergamot pears. From A. D. Williams, King of Wurtemberg, Chelmsford, Andrews, Williams's Bon Chrétien, Cushing and Summer Thorn pears; and Porter, Sops of Wine and Lady apples. From S. R. Johnson, large clusters of white Frontignac and white Chasselas grapes, from the open air.

From B. V. French, a large collection of good fruit, particularly of apples, as follows:—Mela Carle, Black, Ortleypippin, Monstrous pippin, Yellow Bellflower, High-top sweeting, Court Pendu Plat, Porter, Garden Royal, Adams's sweeting, Hawthorndean, Garden Striped, French Sweet, Fall Sops of Wine, Bourasoe, Sweet greening, Pomme de Neige, Dutch Codlin, Templeton Winter Sweet, and red and green Winter Sweet—twenty varieties, and the best collec-

tion of this noble fruit in the room; also, *Passe Colmar*, Chelmsford, Ronville, Archduke of Austria, Williams's *Bon Chrétien*, Cushing, Harvard, *Beurré Von Marum*, King's *Bon Chrétien* and *Monsieur Le Curé* pears.

From J. M. Ives, Salem, the following pears:—*Belle Lucrative*, Napoleon, *Beurré Bosc*, King of Wurtemberg, Raymond, Early *Beurré* of Prince's *Catalogue*, *Beza Montigny*, Williams's *Bon Chrétien*, Cushing, Washington, and *Passe Colmar*; also, *Swaar*, Danvers Winter Sweet, Rambo or Romanite, Wellington, Michael Henry pippin, *Drap d'or*, Mela Carle, and Camfield or Newark Sweeting apples; Crugar's seedling, blue *Imperatrice* and Sharp's Emperor plums; Skillman's netted and Murray's pine-apple melons. From Mrs. Gibbs, Boston, St. Germain, Garnons and St. Michael pears. From Gen. Sumner, Brookline, raspberries of the second crop, on new wood; also, Broca's *Bergamotte*, green Muscat, Summer Thorn and Heathcot pears.

From J. A. Kenrick, a variety of good fruit, viz:—Kilham Hill, York russett, Hubbardston Nonsuch, Rhode Island greening, Baldwin, Cogswell, Dutch Codlin, Rambour Franc, Pumpkin sweet, yellow Crab, Porter and High-top sweeting apples; St. Michael and Andrews pears; Cutter's yellow rareripe, Morrisiana pound, Heath, Van Zandt superb, and Wells's freestone peaches; also watermelons. From John Fowle, Roxbury, Williams's *Bon Chrétien* pears. From Joseph Balch, Roxbury, Grizzly Frontignac, Black Prince, Blanquette, French, and a variety of grape, name unknown—all handsome and fine clusters. From Jos. Pines, Hanover, N. H., sweet baking apples. From William P. Richardson, Salem, Ribstone pippin apples, and *Rousselet de Rheims*, Broca's *Bergamot*, and Seckel pears, superior specimens. From S. H. Colton & Co., Worcester, seedling peaches and seedling apples.

From Col. T. H. Perkins, by Mr. Cowan, splendid peaches, nectarines and grapes, viz:—New Royal George and Grosse Galande peaches; Broomfield and Elrue nectarines; and black Hamburg, Muscat of Lunel, Muscat of Alexandria, White Nice, St. Peters, Golden Chasselas, and white sweetwater grapes. From Mrs. T. Bigelow, Medford, Jacques's rareripe, and two varieties of seedling peaches, very fine; St. Michael and *Bon Chrétien* pears; Monstrous pippin, and blue pearmain apples; striped melons and fine large lemons. From J. Parkman, Brighton, *Duchess d'Angoulême* and *Monsieur Le Curé* pears. From C. Warren, Brighton, Williams's *Bon Chrétien* pears. From C. Sharpe, Brookline, an Imperial watermelon, weighing twenty-two pounds, a very large and superior specimen of this most excellent variety.

From George Brown, Beverly, a good collection of fruit, viz:—Seckel, Williams's *Bon Chrétien*, *Passe Colmar*, Van Mons, Napoleon, Summer Thorn, Catillac, *Bergamot Nonpareil*, and other varieties of pears, without names; seedling nectarines, called the Harrison; also, *Drap d'Or*, Brattle white, green sweeting, Siberian crab, Holland and Lady apples. From J. Fisher, Brookline, Williams's *Bon Chrétien*, Seckel, Andrews, St. Michael, Cuisse, Madam, Wilkinson and Cushing pears. From Dr. Burnett, Southborough, Burnett pears. From Capt. George Lee, Cambridge, red Calville and Ribstone pippin apples; Minorca and Imperial watermelons. From E. T. Hastings, Boston, St. Michael pears.

From E. M. Richards, Porter, Hawthorndean, Walpole, Summer pearmain, Fall Sops of Wine, Fall pippin, Marseilles red, red Ingea-

trie and yellow Ingestrie apples; also, Cushing, Foster, and Harrison pears. From E. Newbury, Brooklyn, Conn., fine specimens of Jacques's yellow rareripe peaches. From J. J. Low, Roxbury, *Gloria mundi*, Ribstone pippin, Bellflower, Mackay sweeting, and blue pearmain apples; also, Andrews, Johonnot, St. Michael, Urbaniste, Fulton and Sylvange Verte pears. From William Pratt, by Mr. McLennan, Andrews pears, and fine specimens of black Hamburg, white Frontignac, and white Sweetwater grapes.

From S. Downer, apples and pears, viz:—Dix, Urbaniste, Marie Louise, and King of Wurtemberg pears; also, Lyscom, Hawthorndean, and red and green Sweeting apples. From Geo. Newhall, Dorchester, Cushing, Fulton, Belle et Bonne, Seckel, King of Wurtemberg, Cumberland, Andrews, Dix, Urbaniste, and Williams's Bon Chrétien pears: also, Hubbardston Nonsuch, Bellflower, and Pumpkin Sweet and Porter apples. From N. N. Dyer, South Abington, Mass., Bourne sweeting, Beam, (very large,) black Bantoe, Elijah, and one variety of apple, name unknown. From John Hovey, two varieties of peaches, and white Sweetwater grapes from the open air. From T. Comstock, Poughkeepsie, N. Y., Virgoulouse (?) and St. Michael pears, and spice and Hagloe crab apples.

From Elias Phinney, Lexington, a large collection of pears, apples, peaches and grapes, embracing many new and fine varieties—some of his specimens were very large, fair, and of great beauty. We regret that his list has been mislaid, and that we are not able to give an account of all the different varieties.

From S. Walker, Wilkinson, Orange, Belle de Brussels, Bergamot, and one kind of pear without name: also, Coe's golden Drop plum. From J. L. L. F. Warren, Porter, monstrous pippin, River, and Crab apples; Urbaniste, Washington, and King of Wurtemberg pears; Prince's red rareripe, and seedling peaches; Sweetwater grapes from the open air; and Imperial watermelons. From F. Tudor, Esq., from his garden at Nahant, Petit Madam, and Winship peaches. From Charles Johnson, Weston, Seckel, and King of Wurtemberg pears, and Hawthorndean apples. From T. Johnson, Chelsea, Citron melons.

Vegetables:—The exhibition of vegetables was not so good as last season: but few specimens were sent in, owing probably to the early day of the exhibition, compared with last year. The following are all that were exhibited:—

From E. Phinney, Esq., Lexington, a Harrison squash, weighing one hundred and thirty-seven pounds, a large and very superior specimen of this valuable tribe; also, a large African squash. From A. D. Williams, fine specimens of Autumnal Marrow, and Crookneck winter squashes; also, tomatoes and blood beets. From Richard Ward, Roxbury, very large Lima beans.

From Hovey & Co., superior specimens of the new white carrot, some of them eighteen inches long. From John Hovey, tomatoes. From N. N. Dyer, two ears Brown corn, thirteen inches long, [this appeared to us to be the Parker.—*Ed.*] From Harrison Gray, Roxbury, Spanish tomatoes. From T. Johnson, Chelsea, Canada Crookneck squash, Parching corn, (ripened in ninety-seven days,) and Early Canada corn, a good specimen. From J. L. L. F. Warren, Seven Years' pumpkin, Autumnal Marrow squash, growth of 1839, Autumnal Marrow squash of this year's crop, and sugar beet.

Sept. 12th.—An adjourned meeting was held to-day—Mr. French, the Vice-President, in the chair.

A committee of three, consisting of Messrs. S. Walker, S. Pond, and C. M. Hovey, were appointed to nominate a list of officers for the ensuing year.

A letter was read by the Corresponding Secretary, from Mr. Vose, the President, in which he respectfully declined being a candidate for re-election. It was referred to the nominating committee.

A vote of thanks was passed to the contributors of fruits and flowers at the annual exhibition, and to the Committee of Arrangements and the Chairman, for their labors in getting up the exhibition.

A motion was made to abolish the article in the constitution, relating to the appointment of counsellors. According to one of the by-laws, this must lay over till the next stated meeting.

A. McLennan and — Banks were admitted subscription members of the Society. Adjourned to Sept. 19th.

Sept. 19th.—An adjourned meeting. No business of importance was transacted, and it was adjourned one week, to the 26th.

Exhibited. Fruits:—From S. Pond, Surpasse Virgoulouse and Spanish Bon Chrétien pears; also, Lombard and blue Imperatrice plums. From E. Sharp, Dorchester, large white peaches. From J. L. L. F. Warren, Porter apples, Princes' red rareripe, and Teton de Venus peaches; also, muskmelons, grown from seeds brought from Paris in 1838, by Rev. J. Pierpont. From S. Whiting, Dedham, Seckel pears.

A meeting of the dahlia growers of the Society was held this day, to make arrangements for the grand dahlia show. It was voted that it take place on the 23d and 24th of September, and that Messrs. S. Walker, D. Haggerston, and C. M. Hovey be a Committee of Arrangements for that purpose.

Sept. 23d.—The first *Grand Dahlia Show* of the Society for premiums, took place on Wednesday, the 23d September. The rooms were open to the public on Wednesday, at twelve o'clock, noon, and continued open till Saturday, the 26th, at six o'clock, P. M.

The exhibition was much finer than the most sanguine cultivator could have anticipated, and the number of competitors for the premiums larger than expected. Nearly three thousand superb blooms of the dahlia, of all colors and shades, were displayed, besides fine collections of asters and annuals, both of which were also exhibited for the Society's premiums. A variety of bouquets, verbenas, and other flowers, were also contributed, which rendered the show much more interesting. Messrs. Hovey & Co. presented a stand of splendid verbenas, and Mr. Walker three fine bouquets. German asters, from Josiah Stickney, S. Sweetser, J. J. Low, and J. L. L. F. Warren.

The rules and regulations of the Society, which we have previously published, were strictly adhered to on the occasion of this exhibition, and we think it will have a greater tendency to spread a correct taste for this beautiful flower, than any exhibition which has ever been made. The blooms were shown in classes of six, twelve, and twenty-four; besides these, there was a grand display of specimens not entered for premium.

The principal contributors were Josiah Stickney, M. P. Wilder, Hovey & Co., D. Haggerston, J. J. Low, S. Walker, D. McIntyre, Jos. Breck & Co., S. Sweetser, W. E. Carter, J. A. Kenrick, Capt. Macondry, W. Kenrick, W. Meller, H. W. Dutton, W. Bacon, J. L. L. F. Warren, P. G. Seabury (New Bedford,) P. Barnes, Messrs. Winship, J. T. Buckingham, Rufus Howe, and A. McLennan.

The names of the dahlias which obtained the prizes awarded by the judges, are as follows:—

PREMIER PRIZE.

Best six dissimilar blooms:—Gaines's Primrose, Marshal Soult, Suffolk Hero, Dodd's Mary, Rose Superior, and Lady Bathurst—M. P. Wilder, a premium of \$15.

SPECIMEN BLOOM.

Best bloom:—Gaines's Primrose—M. P. Wilder, a premium of \$5. Discretionary premium of \$5, to J. J. Low, for *Girling's Castanda*.

DIVISION A.

Open to all cultivators of more than two hundred plants.

CLASS I.

Best twenty-four dissimilar blooms:—Lady Bathurst, Marshal Soult, Suffolk Hero, Glory of Plymouth, Hedley's Penelope, Topaz, Castanda, Rival Sussex, Harwood's Defiance, Dodd's Mary, Stanford's Contender, Eva, Ne Plus Ultra, Countess of Liverpool, Glory, Ovid, Springfield Rival, Rosetta, Lord Byron. Dennisii, Striata formosissima, Sir Henry Fletcher, Mrs. Rushton, Yellow Perfection—M. P. Wilder, a premium of \$8.

Second best twenty-four dissimilar blooms:—Suffolk Hero, Springfield Major, Lady Dartmouth, Purple Perfection, Countess of Mansfield, Warminster Rival, Blandina, Sunbury Hero, Grand Purple, Queen of Scots, Maria Edgeworth, Horsham Rival, Sir Henry Fletcher, Marshal Soult, Exquisite, Lilac Perfection, Sulphurea elegans, Mrs. Rushton, Triumphant, Striata formosissima, Red Rover, Unique, Rival Sussex, Napoleon—J. J. Low, a premium of \$6.

CLASS II.

Best twelve dissimilar blooms:—Lewisham Rival, Castanda, Unique, Fire-ball, Virgin Queen, Eva, Striata formosissima, Marshal Soult, Clark's Julia, Stanford's Contender, Sulphurea elegans, and Essex Rival—Josiah Stickney, a premium of \$6.

Second best twelve dissimilar blooms:—Gen. Washington, Marshal Soult, Independent (Widnall's), Cambridge Hero, Sulphurea elegans, Zeno, Blandina, Reliance, Royal Standard, Unique, Elphinstone's Horticulturalist, and Duchess of Richmond—Hovey & Co., a premium of \$4.

CLASS III.

Best six dissimilar blooms:—Beauty of the North, Suffolk Hero, Quilled Perfection, Sulphurea elegans, Dodd's Mary Queen of Scots, and Fowler's Queen Victoria—D. Haggerston, a premium of \$4.

Second best six dissimilar blooms:—Zeno, Unique, Rienzi, Beauty of Bedford, Dennisii, and Fowler's Queen Victoria—J. A. Kenrick, a premium of \$2.

DIVISION B.

Open to all cultivators under two hundred plants.

CLASS I.

Best twenty-four dissimilar blooms:—Castanda, Hope, Marshal Soult, Lady Bathurst, Lord Liverpool, Suffolk Hero, Fire-ball, Striata formosissima, Madonna, Countess of Liverpool, Mrs. Broadwood, Ne Plus Ultra, Sir Robert Peel, Splendissima, Clark's Julia, Bowman's Premier, Bontisholl, Eva, Unique, Elliot's Coronation, Rival Sussex, Rienzi, Middlesex Rival, and Lord Ingestrie—D. McIntyre, a premium of \$8.

Second best twenty-four dissimilar blooms:—no prize awarded.

CLASS II.

Best twelve dissimilar blooms:—Horsham Rival, Sulphurea elegans, Princess Victoria, Gem, Eva, Fowler's Queen Victoria, Napoleon, Suffolk Hero, Duchess of Richmond, Ne Plus Ultra, Unique, and Bowling Green Rival—S. Walker, a premium of \$6.

Second best twelve dissimilar blooms:—Summum Bonum, Cambridge Hero, Sesostria, Princess Victoria, Unique, Mrs. Rushton, Maria Edgeworth, Countess of Mansfield, Rienzi, Striata formosissima, Marshal Soult, and Quilled Perfection—S. Sweetser, a premium of \$4.

CLASS III.

Best six dissimilar blooms:—Hope, Lady Dartmouth, Quilled Perfection, Ne Plus Ultra, Countess of Torrington, and Countess of Mansfield—W. Meller, a premium of \$4.

Second best six dissimilar blooms:—Chandler's Magnificent, Mrs. Rushton, Lady Milton, Golden Sovereign, Eva, and Mary Queen of Scots—W. E. Carter, a premium of \$2.

No seedling bloom was exhibited for the prize. The second stand of twenty-four, in Division B., was set aside for its generally faulty appearance. There were fifteen entrances for the best specimen bloom, and four for the premier prize. The judges were appointed by a majority of the contributors, and there were a set of judges, consisting of seven, for each division.

At the same time the premiums for German asters and annuals were awarded as follows:—

GERMAN ASTERS.—For the best display, to Messrs. Hovey & Co., a premium of	\$5 00
For the second best display, to J. J. Low, a premium of	3 00
ANNUALS.—For the best display, to J. Breck & Co., a premium of	3 00
For the second best display, to Hovey & Co., a premium of	2 00

Messrs. S. Walker and ——— Banks were judges.

On Thursday, the 24th, the exhibitors and judges, with a few invited guests, dined together at the Exchange Coffee-House. Among the gentlemen present was Gen. Dearborn, Rev. Mr. Colman, Commissioner of the Agricultural Survey, N. J. Becar, Esq. of New York, and Mr. Buckingham, of the Courier. The Chairman of the Committee of Arrangements presided, assisted by Mr. D. Haggerston and C. M. Hovey. Upwards of thirty set down to the dinner.

After the cloth was removed, the Chairman rose and offered the following sentiment, which was drank with great applause:—"The founders of the Massachusetts Horticultural Society;—they will be held in grateful remembrance, so long as Flora and Pomona shall have admirers, and Mount Auburn shall contain its sacred deposits."

Gen. Dearborn rose and returned thanks to the gentleman for the compliment, which he presumed was intended for him; for although he saw among those present, some who were among the first founders of the Society, still the allusion made to Mount Auburn he must consider as referring to his own humble exertions in selecting that beautiful spot. We shall not attempt to follow Mr. Dearborn in the eloquent remarks which he made on this occasion: to all who know him, and his deep and intense love of every thing relating to floriculture and horticulture, it is sufficient to say that they were such as delighted and interested every individual present. No man of our acquaintance is possessed of such a vast fund of information as Gen. Dearborn, and few have the power of expressing their ideas so elo-

quently. He concluded with a sentiment, complimenting the London Horticultural Society, on the great good which had resulted from the establishment of that Society, the first in the world.

Mr. C. M. Hovey then rose and offered the following toast:—"Horticulture and Agriculture—twin sisters: the former, that more refined art, which produces the luxuries of life—the latter, that noble science, which contributes to the comforts and necessities of our existence. While its interests are looked after with such industry, as they now are, under the fostering encouragement of the State, we need not fear but that its progress will be onward."

The Rev. Mr. Colman rose in reply. He had, he said, been selected by the State for the important duty of conducting an agricultural survey—his duties were necessarily connected with his commission; but in executing his task he had been a careful observer of every thing relating to horticulture and floriculture: he was himself a great lover of flowers. In early life this love had been deeply impressed upon him; and though, by other duties, called away from a participation in the pleasing pursuits of the flower garden, every youthful feeling was renewed on beholding such a splendid exhibition of the dahlia as was made on the occasion which the company were called together to celebrate. He concluded with a sentiment.

The toast was drank with great applause. Mr. Hovey also proposed the following toasts:—"The Horticultural Society of Brooklyn, N. Y.,—first organized by the exertions, and under the auspices of some of the most zealous and wealthy amateurs of Brooklyn, whose gardens are perfect models of neatness and cultivated taste—Prosperity to its labors in the great cause of Floriculture and Horticulture."

Mr. Becar did not feel himself able to respond to the sentiment after the gentlemen who had addressed the meeting. He proposed "Health and success to the members of the Massachusetts Horticultural Society."

"The Press—To its ready and ever willing aid, Floriculture and Horticulture are greatly indebted for its success. However so much local and political questions may divide its interests, science is the broad stand upon which they may all equally meet."

Mr. Buckingham rose and stated that he was not prepared to make a speech; he did not indeed know that he should be present till a short period before the meeting. But the sentiment which had been just offered would not allow him to remain silent. Mr. Buckingham concluded with a toast, which we regret we are unable to give.

We wish we had it in our power to present a number of the toasts which were offered, but we were too much engaged to allow us to take any notes.

Several addresses were made and many excellent sentiments offered; a variety of songs were also sung, which added to the hilarity of the occasion: the enjoyments of the evening passed off delightfully, and the company separated with the hope that it was but the first of a series of meetings which would take place annually.

For our own part, we think the dahlia exhibition will be attended with great benefit to the interests of the Society—it will draw together the various cultivators, and frequent intercourse with each other will remove much of the jealousy which too often exists among amateurs and gardeners. The influence which the dahlia show will have upon the cultivation of this beautiful plant will be apparent another season: the Society, by following the plan of the Metropolitan Society of London, will set the public aright in their opinion respecting a good dahlia, and it will not be long before the old and inferior kinds

will be banished from our gardens, and varieties possessing the true characteristics of a flower, cultivated. We look forward with pleasure to another season, assured that the greatest good will arise from the establishment of a grand dahlia exhibition.

ART. IV. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Pot and Sweet Herbs.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes, new:				Paraley, per half peck,		25	—
Cbenangoes, } per barrel,	1	25	1 50	Sage, per pound,		17	20
} per bushel,		50	75	Marjorum, per bunch,		6	12
Common, } per barrel, . .	1	00	—	Savory, per bunch,		6	12
} per bushel,		50	—	Spearmint, per bunch,		6	—
Sweet, per bushel,	1	00	1 25				
Turnips:				<i>Fruits.</i>			
Common, per bushel, . . .		50	—	Apples, dessert:			
Ruta Baga, per bushel, . .		—	—	Common, per bushel,		37½	50
Onions:				Extra, per bushel,		75	1 00
New white, per bunch, . . .		4	6	Porter, per bushel,	1	00	1 50
Red, per bunch,		4	5	Baldwins, per barrel,	1	50	1 75
Yellow, per bushel,		75	—	Russetts, per barrel,	1	50	1 75
White, per bushel,	1	00	—	Greenings, per barrel	1	50	1 75
Beets, per bushel,		50	75	Dried apples, per pound, . .		6	7
Carrots, per bushel,		50	—	Pears, per half peck:			
Parsnips, per bushel,		75	—	Seckel,		50	75
Shallots, per pound,		20	—	Fulton,		50	—
Garlic, per pound,		12½	—	Dix,		50	75
Horseradish (pickling,) pr lb.		10	12½	Long Green,		50	62½
				St. Michael, per dozen . . .		50	75
<i>Cabbages, Salads, &c.</i>				Broca's Bergamot, pr doz. .	1	00	—
Cabbages, per dozen:				Baking, per bushel,	1	50	2 00
Savoy,		50	—	Peaches:			
Drumhead,		50	75	Common, per half peck, . .		25	37½
Red Dutch,		75	—	Good, per half peck,		50	75
Brocoli, each,		12½	25	Extra, per dozen,		37½	50
Cauliflowers each,		12½	25	Grapes, per pound:			
Celery, per root,		8	12½	Black Hamburgh,		50	75
Sweet corn, per doz.		6	8	White Sweetwater,		33	37½
Pickles, per hundred,		20	—	White do. (open air.)		25	—
Mangoes, per dozen		25	—	Isabella,		12½	—
Peppers, per pound,		2	3	Nectarines, per half peck, . .		50	62½
Purple eggs, each,		8	12	Berberies, per bushel,		50	75
Tomatoes, per half peck, . . .		8	10	Watermelons, each,		12½	25
Beans, (shelled:)				Muskmelons, each:			
Lima, per quart,		8	10	Common,		6	12½
Sieva, per quart,		8	10	Extra,		10	12½
<i>Squashes and Pumpkins.</i>				Cranberries, per bushel, . . .	1	00	1 50
Squashes, per pound:				Lemons, per dozen,		12½	20
Autumnal Marrow,		1	1½	Oranges, per dozen:			
Winter crook neck,		1	—	Sicily,		25	37½
Pumpkins, each,		20	—	Havana, (sweet),		50	—
				Chestnuts, per quart,		25	—

REMARKS.—The weather, throughout September, up to this date, has been delightful; the temperature has been steady, without sudden changes, and, except in a few low and cold situations, no frost to do

any injury has been experienced in the vicinity of Boston. Occasional showers have fallen, which have been highly advantageous to the turnip and potato crops, and to the growth of late cabbages, celery, &c.

In the early part of the summer it was feared, from the long continued drought, that the potato crop would be greatly cut short: early ones suffered much; but we believe that, in but few instances, no apparent injury has been done to late ones. Had the drought continued but a few days longer, they would have been past all recovery; but the heavy rains in August brought the vines on so rapidly, that, with the continued showers throughout the month, they have produced more than an average crop; the market is, in consequence, now well supplied with a prime article, at low rates. Sweet potatoes are of very superior size and quality this season, and the stock is kept up by constant arrivals. Turnips are now brought in by the bushel, and of remarkably fine quality. The crop of onions is more abundant than usual, and several lots have arrived from Rhode Island and Connecticut; twenty thousand bunches were sold at auction this week. Beets and carrots now come in by the bushel, and crops of the latter have been very heavy. Parsnips have also come to hand this week. Cabbages are plentifully supplied: of Drumheads many thousand heads have been brought in, within the last fortnight. Savoye are not yet fully grown, but fine heads have come to hand. Brocolis are of very large size and beautiful appearance this season. Cauliflowers have been brought in, and of fine size. Sweet corn is yet abundant. Pickles nearly gone. Peppers plentiful and cheap. Tomatoes in abundance. Celery is remarkably fine. The market has not been so well supplied with Lima and Sieva beans for several years. Squashes are now brought in in large quantities, and Autumnal Marrows of prime quality, only command our highest quotations.

Fruit continues abundant. Apples are yet dull, notwithstanding prices for superior Baldwins are so low: Porters, from the lateness of the season, are in demand, and prices higher. Pears of first rate quality have been well supplied: besides these kinds enumerated, many other sorts may be obtained, such as the Urbaniste, King of Wurtemberg, &c. Plums are all gone. Peaches are still well supplied from the vicinity of the city, and with some of very superior quality. Forced grapes are plentiful, and prices low: Isabellas are brought in in great quantities. Of watermelons and muskmelons a good supply. Cucumbers are gone. Cranberries were never more abundant; immense quantities have already been brought in, and shipped to the south. A few new chestnuts have been received, which sell by the quart at quotations.—*M. T., Boston, Sept. 28th, 1840.*

HORTICULTURAL MEMORANDA

FOR OCTOBER.

FRUIT DEPARTMENT.

Grape vines will now be ripening their wood rapidly. Give an abundance of air in all fine weather; pick off all decayed leaves as

they fall, and prune off the laterals towards the base of the vines, when the wood is fully ripe.

Strawberry beds planted last month, should be kept clear of all weeds, and hoed once or twice. Old beds should be cleaned out, the alleys forked over, &c.

Raspberry vines may be planted with success this month.

Currant and gooseberry bushes may also be planted this month.

Fruit trees of all kinds may be removed this month with safety.

FLOWER DEPARTMENT.

Dahlias will need attention this month. As soon as the first frost has killed the branches, the roots may be taken up, choosing a dry day to do so, and not immediately after a rain, as the soil would then adhere too closely to the roots. Place them in a dry shed or room for a few days, and then remove them to the cellar, where there will be no danger of frost, or under the stage of the green-house.

Tulip and hyacinth beds may be planted the latter part of this month; but the beds should be well dug over, and prepared early in the month.

Tiger lily, white lily, and other similar hardy bulbs, may be planted this month.

*Gladioluses and tuberose*s should be taken up after the first frost.

Amaryllises and tiger flowers should be also taken up, if there is danger of frost.

Oxalises may now be potted for flowering in winter.

Ixias, sparaxis, &c. may be planted in pots this month.

Hardy perennial plants may now be removed with safety.

Peonies should now be taken up, separated and replanted.

Chrysanthemums should be carefully watched, and not be allowed to stand out in a very severe frost, or the buds would be injured.

Camellias will need cleaning, top-dressing, &c., and if convenient, and it is desirable to have them look in fine order, the leaves should be washed.

Mignonette, sown in pots in August, should be very carefully watered.

Verbenas that were layered off into pots, in August and September, may now be taken up.

Geraniums will need top-dressing, pruning, &c.; all cuttings that are well rooted should be potted off.

Roses, of tender kinds, which have been planted out in the border, should be taken up and potted.

Ericas, epacrises, &c. must be carefully looked over, and if they need repotting, they must be attended to.

Annual seeds, such as larkspurs, chryseis, clarkias, coreopsis, &c., may be planted in October.

Petunias, wanted for flowering in winter, should be taken up and potted.

Amaryllises should be potted this month.

Double perennial sunflower roots should be taken up and protected in the same manner of dahlias.

Cactuses should now be very slightly watered, except *Epiphyllum truncatum*, which will need occasional supplies, as it will soon be flowering.

Pansies raised from seeds, planted in July or August, should be kept clear of weeds, and the soil hoed once or twice.

THE MAGAZINE

OF

HORTICULTURE.

NOVEMBER, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Some Notes on Gardens, and the state of Horticulture, in Worcester, Mass.* By the EDITOR.

WE lately had the pleasure of spending a few hours in the delightful town of Worcester, situated in the heart of the State, about forty miles from Boston. Though within a few years the population of the town has but slightly increased, yet it is destined to be one of the most flourishing in the Commonwealth. The Boston and Norwich rail-road and the great Western rail-road pass through it; the former already completed, and receiving a great portion of the immense travel between Boston and New York: the latter is completed yet only as far as Springfield, but probably, in the course of another year, it will be finished as far as Albany, and opened for public travel, and will then be a medium of rapid communication between the latter city and Boston: these great routes, passing as they do through Worcester, and thence intersecting the manufacturing places of this State and Connecticut, will be of great benefit to the town. The easy and rapid ride from Boston will undoubtedly render it a place of resort, during the summer season, to those who have the leisure, and who delight to breathe the country air, in preference to being penned up in the stifled atmosphere of a thickly populated city.

Worcester is beautifully situated for elegant summer residences. There are many splendid dwellings already, belonging to the wealthier inhabitants of the town; but beyond its immediate vicinity there is scarcely a single residence of any note: the natural beauty of the land around the village

affords delightful sites for elegant gardens. The whole country, as far as the eye can reach, from some of the highest points of land, is finely wooded, the surface varied by gradual and easy undulations, not in the least broken by rocky and abrupt declivities, and partaking of that quiet and rural landscape, so rare in the scenery of this part of the country. From almost every elevated spot of ground around the town, situated as it is in the valley, a fine view is obtained of its handsome dwellings and towering spires, and as the distance recedes, only the hazy appearance of the atmosphere denotes the situation of the village.

The rail-road to Worcester passes through a delightful and generally fertile country, much more so than either of the other rail-road routes from the city; through Brighton, Newton, Natick, Northborough, Westborough, &c.; and although the rapid motion of the cars presents scarcely any enjoyment of the scenery to the traveller, yet some of the views are extensive, and enough is seen to show at once the fertile region of the country.

We recollect of reading, in the last volume of the *Gardener's Magazine*, some remarks on treating the ground on the margins of rail-roads, where there were embankments of any extent. These remarks we had marked for insertion in our pages, but had forgotten them until the present moment, when called to our mind as we passed the grounds of the Messrs. Winship, in Brighton. The road passes immediately through the nursery, dividing it in two parts; but these gentlemen have so arranged the sandy embankments with terraces, planted with shrubs, &c., as to render them very ornamental. We only wish that other gentlemen who are able, would take the same pride in improving the embankments where they pass through their lands. It might be done at a very slight expense, and the interest it would afford to the traveller, as well as pleasure to the owner to see his labors appreciated, would well repay a few days of extra labor. Such a series of embellishments, for several miles from the city, would render all the rail-road routes as interesting as the old public thorough-fares.

The terraces of the Messrs. Winship are made in the following manner: the distance is from ten to fifteen feet. A wall is laid of about four feet; then a grass banking of from three to five more, at an angle of forty-five or fifty degrees; this is the first terrace, and the surface, (about five feet wide,) is filled with fine flowering shrubs and herbaceous plants; another grass banking of five feet more, at the same angle, is thrown up, and the surface prepared and planted

out with shrubs and plants. When in the vigor of growth and flowering, these terraces have a fine effect, contrasted with the barren sand, which happens wherever there is a cut of ordinary depth. We have annexed the following engraving, representing the same:—

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In the section (fig. 10,) *a* is the rail-road; *b* is a wall four feet high; from this an embankment is made, *c*, four feet high, at an angle of fifty or fifty-five degrees; the surface of this bed, which is four or five feet wide, formed by the banking, is covered with soil to the depth of eighteen or twenty inches; another bank, *d*, is then thrown up at the same angle as the former, and a level bed completes the surface; the dotted line, *fg*, is the angle of the embankment as left when the rail-road is completed. A hedge might be planted, as shown in the plan, on the opposite side of the walk.

Worcester is said to be one of the most beautiful towns in the State: it is one of the oldest, and some of the dwellings have an ancient and venerable appearance. The old inhabitants of the town must have had a taste for trees, as there are a great number of fine elms and button-woods, of immense size: Worcester, in this respect, is far in advance of many other towns; not only have these venerable trees been preserved, but there have been shade trees planted by almost every occupant of a piece of ground in front of his enclosure, so that the principal streets are already lined with good sized trees. The main street, which is very wide, is overshadowed in many places by the branches of the elm or the button-wood, planted on each side, affording a cool and shady walk, even in the intense heat of a summer's sun. Such a general taste for trees we could wish to see emulated in every town throughout the State.

Residence of William Lincoln, Esq.—On the old Boston road, about half a mile from the centre of the town, is situated

the farm of Mr. Lincoln, an old residence formerly belonging to his father. The mansion is a fine building of the old style of architecture, generally adopted in the better class of buildings fifty or sixty years since. The grounds are situated on the westerly side of the road. From the garden front of the house the view embraces a portion of the village, and to the right a dense wood intervenes between the farther extent of the grounds and the cemetery: the land lies pleasantly to the south-west, and is well adapted for a flower, fruit or vegetable garden; but, as little or no care has been taken of the place, for five or six years, since Mr. Lincoln resided on the premises, every thing has been neglected, and it now presented no attractions other than its natural beauties, and its capabilities of being rendered one of the most delightful spots in the vicinity of the town. Mr. Lincoln, a few years ago, took hold with his own hands to improve the place, and the many elegant white pines and other trees which have now attained a fine size, show that if he had only carried out what he so zealously begun, at this very moment it would equal many of the fine residences around Boston. But, for some reason, he suddenly gave up the idea of completing his improvements, and, since then, not a single tree has been planted, or any thing else done to keep the grounds even in the state they were left: the garden has been annually ploughed up, and planted with potatoes and other vegetables.

The whole extent of Mr. Lincoln's residence is about one hundred and fifty acres, including a fine piece of water of an acre or more; around this a double row of white pines was planted eight or ten years ago, and they have now grown up so as to completely hedge in the pond. The garden descends to the water, and passing round it, on the other side, the land remains in its primitive state, covered with a large and vigorous growth of oaks, pines, hemlocks, &c. The grounds possess so many natural beauties, that we hope Mr. Lincoln will again resume the control of the place, and carry out the plan which his good taste induced him to begin; a few months' labor would give it a cultivated and beautiful appearance.

Three or four years ago the place was occupied by Mr. White, now connected with Messrs. Colton & Co. in the nursery business. Mr. White, while he had it under his care, erected a brick pit after the method described by us in our I., p. 401, partly on West's system, with some alterations of our own. We also noticed a small green-house or grapery, but no vines were planted in it, nor had any pains been taken to improve it. With some alterations, and with the addition

of a good border, planted with flourishing grape vines, a crop might be obtained in the course of a year or two. The great characteristics of the place are its fine locality, and its capability of being laid out in such a manner, as to render it a first-rate residence.

Garden and Farm of J. W. Russell.—It is already known to many of our readers that Mr. Russell owns a fine farm in the vicinity of Worcester, to which he intends removing from Mount Auburn Cemetery, at Cambridge, in the spring of 1841. Mr. Russell has conducted the affairs of the Cemetery with signal ability, and it will be difficult to find a man to take his place. He is one of the most able practical men in the vicinity of Boston, and his communications in our pages have been among the most valuable which we have offered to our readers. We should deeply regret that we are to lose him from our vicinity, were it not that he removes to so flourishing a town as Worcester, whose citizens possess so much wealth and taste, where we are sure his labors will be duly appreciated, and where he will impart some of his good practical knowledge to the amateurs in the vicinity.

Mr. Russell's farm contains nearly thirty acres. It is situated on the Barre road, to the west of the town, distant upwards of a mile. It is a nearly level piece of ground, rather low, and surrounded with upland, which breaks the winds in every direction, and prevents their sweeping over the plain as they otherwise would. It will be subject to rather early frosts, as we saw the dahlias were cut off, while on the high land, nearer the town, they had sustained no injury.

Nearly two thirds of the farm is now laid down to grass, and Mr. Russell has cut, the present year, fifty tons of hay. The remainder is in tilled land, including the vegetable garden and green-house, which are enclosed within a high and close fence. The green-house, which is sixty feet long, was built two years since, and the grapes have this year produced a good crop; last season they produced about seventy-five pounds, and this year the quantity is nearly double; but a small part of them were cut when we saw them. Mr. Russell's collection of plants is not yet large, but as soon as he takes hold of his collection himself he will fill up all the spare room in a short period. The principal crop of the tilled land has been potatoes: these, together with a good variety of all the common garden vegetables, have been cultivated for the Worcester market. Mr. Hall, who has had the sole charge of Mr. Russell's place, ever since he purchased it in 1836, will leave it when Mr. Russell removes to Worcester, and will then commence a new

garden which he has purchased the past summer, near to Mr. Russell's.

Mr. Russell is now erecting a cottage, for himself and family to reside in. It will be a neat and handsome appendage to his place, and when beautified by his own good taste with trees and shrubs, will be one of the prettiest gardens in the town, and cannot fail to be a resort for those who are fond of fine plants, and who have now to supply themselves from Boston or New York. The establishment of a Horticultural Society, which we shall notice in a future page, will be the means of spreading a taste for fine plants, and the demand for such things will rapidly increase.

W. W. Lincoln's Nursery.—Directly opposite to Mr. Russell's, Mr. Lincoln has just commenced a nursery, and has already planted several thousand trees. The land was broken up for the first time only a year ago, and Mr. Lincoln must have labored assiduously to plant out so many trees in so short a space of time. The whole extent of the nursery we should judge to be five or more acres; the situation is higher than Mr. Russell's, and gently rises to an elevation of twenty feet or more from the Barre road. Mr. Lincoln informed us that it was merely a beginning, but he hopes to add very much to the number of trees, and eventually to make his nursery as complete as any which will be found in Worcester. There is already a good demand for trees, but the supply is now almost wholly procured from Boston.

S. H. Colton & Co., nearer the town, and but a few rods from the main street, are also establishing a nursery. We had not time to call on our friends, but they are making rapid progress in filling up their nursery, and they intend it shall contain a complete assortment of all the best fruit and most desirable ornamental trees.

The Residence of Gov. Lincoln is a fine situation, but a few rods west from the town house. The ground is elevated, and commands a fine view of the surrounding country. The garden, which descends at a gradual slope from the east front of the house, contains a variety of plants and shrubs, and an excellent collection of annual flowers, verbenas, &c. There is a want of ornamental trees, to give variety to the grounds; but it may be made a very fine place.

E. F. Dixie, Esq. has a very fine residence on the main street, a few rods to the south of the town hall. The house is built in the modern style of architecture, and of good proportions: the whole was undergoing thorough repairs, painting, &c., previous to his occupying the same, Mr. Dixie

having just purchased the place. His old garden was farther to the south; we visited this place also, but as it is of limited extent we cannot say much respecting it. Some fine celery had just been earthed for the last time; the dahlias had been killed by frost a few days previous. A bed of wood strawberries was in fine condition, and had produced a most abundant crop. All the fine plants Mr. Dixie will remove to his new garden, where he has ample room to add every thing new and beautiful.

The Cemetery.—The spot which has been selected for the cemetery in Worcester, is a most delightful and picturesque place, reminding us somewhat of many parts of Mount Auburn. The whole extent of the ground is about forty acres, and it can be increased to twice that number at any time, should its present size be found too limited for the town. The cemetery is situated on the Greenfield road from Worcester, running north. It is laid out with avenues and paths, copied in a degree from Mount Auburn, but not possessing the graceful curves and artistical lines, which are the most attractive features of the latter place. It is however well laid out, and kept in very good order. The surface is considerably undulated, and sufficiently wooded to render it picturesque without being crowded to interfere with the lots which border the avenues and paths.

As yet, there have been but few interments made in the cemetery. Many lots have been selected and fenced in, but we believe only five or six monuments have as yet been erected. It is not to be expected, however, that these will be built as rapidly as they have been in Mount Auburn, even allowing for the small population compared with Boston. The land was presented to the corporation by Daniel Waldo, Esq., and the monument upon a lot, selected by himself, is the neatest one yet erected.

It is a gratifying evidence of the taste which is spreading throughout the community for gardens, trees, &c., to see cemeteries established in the vicinity of all our principal cities and large country towns; and the resort of the public to these places shows the interest which they take in their formation. We shall have something farther to say upon this in our next annual view of the progress of horticulture, and shall notice all the improvements which have been made the present year.

Some other residences than those we have noticed would have been included in our remarks, had we had time to visit them: this we found impossible, and we therefore present these few notes, hoping that the opportunity may soon offer when we may extend them farther.

ART. II. *Autumnal Flowers.*
By X.

THE vegetable wonders of our native flora are fast fading from our view. What myriad blossoms have sprung into being, lived their short day, and are gone in the brief space of a few months! Over hill and mountain, by the shady rill and the babbling brook, in the pellucid lake and by the ocean shore, the countless dyes of the floral world have spread their charms to the glad sunshine or to the balmy air. The golden and purple, crimson and brown, scarlet and orange leaves, are now falling and scattering in our path, while, ere long, the quiet of wintry repose succeeds.

I love to watch the tardy approach of spring, as heralded by the timid flowers of that season, nor is the gradual decline of the year less pleasing as viewed in the departure, one by one, of these monitors of the flight of time. In some I recognize, even amidst November frosts, the daring children of fitful April, and in others the renovated beauty, which the clear air and cooler temperature has produced, after a seeming indisposition to expand their bright petals to the summer sun. Thus the disposition of the violets to bloom again, on the recurrence of the cool days of autumn, is familiar, not only to the florist, but to the mere culler of simples, who wanders with no careless step over the accustomed hill-side, or adown the moist meadow. The pansy fancier consoles himself at the fading of his jetty-spotted and streaked beauties, by the thought of again seeing their splendors, before old winter frowns on his labors and his careful toil. The fairer and simpler violets of my fancy are in like manner lifting their modest heads just above the withering grass, to see how the world wags, and to sip the bracing dews of the delicious, cool, and refreshing weather of pleasant autumn.

Some folks there are, who are fond of grumbling at the famous stories the poets give us about the beauty of spring, and its sweet May morning. Methinks they do great injustice, both to the poets aforesaid, who probably know little enough about the matter, and greater wrong to the pretty flowers of our spring, by the expression of such feelings. I am strongly inclined to the opinion, also, that the warm hill-side and the cozy nook, where golden stars of five-finger and cærulean eyes of liverwort are spangling the ground, are less familiar to them

than their snug fireside and morning couch. Be this as it may, many are the little daring flowers, which will repay our search in their quest, from April's first return to chill November's rule. But the lingering beauties of autumn are thrice welcome to me, tokening an interest in the affairs of man, and monitors to the heart of the Almighty Parent's care of the wide-spread subjects of his creation.

Let me gather you, gentle reader, whom if lady fair, will more kindly receive my humble flowers, with a nicer perception of their intrinsic worth,—let me gather you a farewell bouquet of the year. Here, then, is a famous collection of wildlings, from the fragmentary store of October. A rich golden-rod or two, of distinct contour, for which differences learned botanists will give you some wise name. Enough for us to admire the flat head and thickly set florets of this the more humble, and the fine elastic stem of that which, just now, was gracefully bowing to that prim blue aster, no doubt in admiration of its antiquated charms. And, as to asters, New England can boast of many of these starry and autumnal splendors. One bears her honored name, pre-eminent like herself in stature and beauty. Others rival heaven's own blue, as they fearlessly look upward and expand in its light. The very road-side is rendered more comely by the argus eyes of others, and the forest-shades are garnished with brave and glorious species. October will yield you some three or four kinds, of which let us pluck the humble savory-leaved, the white small-flowered, the diffuse-branching, and the clasping-stemmed. What think you of jointed polygonum, so heathery in its charming red and white corols, as to deceive my honest neighbor from Old England, who doubtless was thinking of the flowers of his ain dear land. The mystic witch hazel shall mingle its thread-like blossoms and yellow leaves, and as for the fringed gentian, who will deny its claims? Next, a few crystalline neottias from the meadow, and a stray five-finger, by way of contrast. The prostrate, the lance-leaved and cucullate violets shall have a place; for who ever heard of refusing the violet, the favorite of all. Two species of bluetts let us tie up in the bunch, one of which, the purple bluet or *Houstonia*, until lately, was new to me as an autumnal flower. As for the other, (*Houstonia cærulea*,) though now small and sparse in its contour, let it recall the sunny-warm days bygone, when troops of children have plucked it by handfull, in the merry month of May.

Bold and adventurous flowers there be, too, which linger throughout the month; and push forth their petals under November's dull, leaden sky. The white stellate-blóssomed *An-*

themis, minute, rosy sand-worts, and creeping pure-flowered chickweeds, and their cousins the hairy mouse-ears, small and perhaps insignificant to most, yet, to the curious and attentive student of nature's mysteries, are unfolding the countless leaves of volumes written by the finger of Deity, and illuminated by the matchless pencil of the Creator. X.

Chelmsford, Oct., 1840.

ART. III. *Notice of the Garden of Prof. J. W. Jackson, Union College, Schenectady, N. Y.* By P. B. HOVEY, Jr.

WE had the pleasure of calling at the garden of Prof. Jackson, of Union College, in August last, and spent a short time in looking through the grounds. We had heard from gentlemen who had previously seen the place, that it was one of great beauty and interest, possessing, as it does, one of the finest collections of hardy plants and shrubs in the country. Prof. Jackson is a most enthusiastic admirer of plants, and has spared no pains to enrich his garden with every new and desirable plant.

The situation of the college buildings is delightful, and commands an extensive prospect of the city and surrounding country. The garden is quite extensive, and laid out with much taste, and every part kept in the neatest order. The collection of hardy herbaceous plants contains a very great variety, both of foreign and native origin; some of the former very rare, and they were now many of them in full bloom. We have a list of all the plants which Prof. Jackson had in his collection in 1837; but since then he has made so many additions, that, to give it now, would be but to enumerate one half of the number. If a complete list could be procured, it would be well worth insertion in the Magazine; and we hope that Prof. Jackson will be induced to send one, accompanied with a few remarks on the cultivation of some of the American species. Those which we particularly noticed were as follows:—

Eryngium amethystinum, color a beautiful blue; *Achillea Ptármica*; *Acónitum variegatum*, very showy; *Spiræa lobata americana*, with large dense heads of red flowers, very beau-

tiful, and a great acquisition to our list of hardy herbaceous plants: we did not learn its locality. [We saw a specimen of this exhibited at the Massachusetts Horticultural Society's room, the past summer, (see p. 316,) and consider it a most splendid species.—*Ed.*] *Hemerocallis cærulea*; *Silène régia*, flowers dazzling scarlet; *Geranium striatum*; a *Dracocéphalum*, from the prairies of Illinois, was very large and fine; *Lychnis fulgens*, and a large number of seedling phloxes, some of which were extremely beautiful, and many others which we had not time to enumerate. *Portulaca speciosa*, growing in patches, was flowering profusely; also the verbenas, of which there was a good number of varieties.

We noticed here, growing in the open ground, the largest plants we have ever seen of the tree pæony, *P. Moutan pæveracea* and var. *p. Banksia*, which Prof. Jackson informed us, blossomed finely, producing flowers of extraordinary size and beauty, the plants perfectly hardy; the *Berberis* [*Mahonia*] *Aquifolium* was also growing finely in the open garden. The collection of roses, embracing both the hardy and tender sorts, is very large, and contains many rare varieties. We also observed a great variety of hardy climbing plants, but few of them were now in flower. The dahlias were flowering very well, notwithstanding there was an excessive drought in that section of the country.

We regret that we were not enabled to make a longer visit; as there were many things which we had not time to examine, especially of hardy herbaceous plants, a collection of which is indispensable in every good garden.

Boston, Oct. 1840.

ART. IV. *Some Remarks respecting the comparative merits of iron and copper Pipes, for heating Green-houses and Hot-houses; with a notice of several Green-houses and Hot-houses, in the vicinity of New York, heated with hot water.* By J. W. PAULSEN, gardener to J. A. Perry, Esq., Brooklyn, N. Y.

HAVING understood that in Boston and its vicinity, copper pipes are used instead of cast iron, for the purpose of heating green-houses and hot-houses by the hot water system, I think

you would serve the public very much, by giving them, through the medium of your Magazine, some account of the comparative merits of iron and copper pipes, for the purposes above mentioned, and also which are, at the present time, considered by amateurs and practical men, in your vicinity, the best adapted for heating garden structures. The following questions appear to me to contain the most important points to be solved.

1. In regard to cheapness, what difference is there between the price of a copper and a cast iron pipe, ten feet in length, and of equal dimensions, the iron of the latter being a quarter of an inch thick?

2. Which apparatus, if heated to the highest degree, and the fire being removed, retains the heat the longest, and what length of time?

3. Are copper pipes of the same durability as iron? Copper pipes being soldered, will the seams, by strong heating and consequent pressure, not produce leaks?

4. Will copper give as strong and wholesome a heat for plants as cast iron?

5. Which metal is at present generally used in England and on the continent, for heating structures for plants?

6. Who was the original introducer of copper, in the place of cast iron pipes?

I feel myself perfectly satisfied of the superiority of the hot water system, for heating hot-houses, to any other method. For the benefit of horticulture in this country, I should like to see all the expenses connected with the introduction of structures for raising plants, as much reduced as possible; because nothing, in my opinion, has so much prevented the more general erection of green-houses and hot-houses, than the cost attending the heating of the same.

The heating of houses, devoted to the cultivation of plants, is an important consideration, for upon the quality of the heat, in a great degree, depend the health and vigor of the plants; information upon the subject is much needed, for in proportion to the knowledge we possess, the more certain will be our success. If the system of heating by copper pipes is preferable, I should be glad to see it take the place of the present mode of heating by cast iron pipes; but, as yet, the former method has not been adopted in this vicinity. The information sought after will, therefore, be not only useful in deciding which is the best mode, but of preventing persons from taking the advantage of the present prevailing ignorance of the value of a hot water apparatus, and thereby charge double what it is in reality worth.

From the subjoined list, containing all the places around the city of New York, known to me, where the hot water system is in use, you will see of what importance this method is to the vicinity of New York. As some of the new establishments will be yet unknown to you, I have added some notices as to their extent.

1. *George Thorburn, Astoria.*—Mr. Thorburn has recently made some very great improvements in his camellia house, which is eighty-five feet long, sixteen wide, and eighteen high. The walk has been handsomely tiled, the old stage removed, and an earth bed made in place of it, on which the plants stand. This house will certainly be, during the winter season, to all lovers of the camellia tribe, an object of great attraction. It is now, after Mr. Anderson has made some alterations on the apparatus, heated with hot water, to Mr. Thorburn's perfect satisfaction.

2. *James I. King, Esq., Weehawk.*—A new conservatory, sixty-five feet long, twenty wide, and eighteen high; span roof; heated with hot water by D. Anderson. This building reflects high credit on Mr. King's taste; the whole is elegantly finished, with an earth bed and marble walk.

3. *John Ehlers, Esq., Weehawk.*—Pelargonium house and stove, ninety-five feet long, twenty wide, and ten high; heated with hot water by D. Anderson.

4. *Alexander Knox, Esq., Greenwich st., New-York.*—A splendidly finished conservatory, sixty-five feet long, twenty-one wide, and twenty high; heated by Anderson with hot water.

5. *William Douglas, Esq., corner of Park Place and Church st., New York.*—Conservatory forty-five feet long, and eighteen wide; hot-house thirty feet long; employs about one thousand feet of hot water pipes; both houses are very elegantly finished with marble walks, &c.

6. *Rose hill College, West Farms.*—Formerly Dr. Mott's residence; conservatory eighty-five feet long, twenty-five wide and twenty-two high; stove of the same dimensions; grapery thirty-one feet long, eighteen feet wide, fourteen high; heated with hot water by David Anderson. Dr. Mott deserves great praise for the taste and judgment he has shown in forming these houses.

7. *Andrew Carragin, Esq., Bloomingdale.*—Conservatory fifty feet long, twenty wide, and eighteen high; stove sixteen feet long; both houses are heated with one boiler; by turning a cock, the heat can at pleasure either be imparted to the green-house pipes, or taken away. Mr. Carragin has displayed

much taste in the finish of these houses. Heated by Anderson.

8. — *Ogden, Esq., Jamaica.*—Heated by hot water pipes under ground; a very handsome little conservatory.

9. *Dr. Barrow, Jersey City.*—Small green-house, heated by hot water. Dr. Barrow's place is distinguished for its neatness, and every where pervades the utmost cleanliness.

10. *Charles Hoyt, Esq., Brooklyn.*—Small green-house, heated with hot water by Anderson.

11. — *Russell, florist, Brooklyn.*—Formerly Dr. Mott's place; a very handsomely built conservatory; marble walk; and heated with hot water by Mr. Hogg, Jr.

12. *N. J. Becar, Esq., Brooklyn.*—Conservatory sixty-five feet long, and a small hot-house heated with hot water.

13. *J. A. Perry, Esq., Brooklyn.*—Heated with hot water, by Anderson; about two hundred feet length, of glass.

I have not omitted places like Mr. Becar's and Perry's, although mentioned in your Magazine on former occasions, in order to make this list as complete as possible.

I think you will perceive, from the list, that in your retrospective review of last year, you were incorrect in your assertion that in Brooklyn alone more had been accomplished in gardening, than any where else around New York.

I remain, dear Sir, yours, most respectfully,

J. W. PAULSEN.

Brooklyn, Oct., 1840.

We shall be glad to hear from any of our correspondents, in answer to Mr. Paulsen's queries respecting the merits of copper or iron pipes. As soon as we have leisure, we will endeavor to add some information ourselves.—*Ed.*

ART. V. *Observations upon the Blight in Fruit Trees, with an Account of a Method of preventing the disease.*

By J. A. LAZELL, Columbus Horticultural Garden, Columbus, Ohio.

By the last number of your Magazine I learn my communication of last month was duly received. It will afford me pleasure to contribute in the least towards the advancement of horticulture.

Much has been written on the subject of *blight* in fruit trees, but more particularly of the pear tree. I have lost some fine trees by that disease, and the last, when loaded with fruit. It is so destructive to the pear tree in some sections of the country, that its culture is almost given up.

A friend of mine informed me, some time since, that he had discovered the cause of, and the remedy for, the blight. The remedy is so simple that it should be known by every body, whether the cause is or is not understood. He stated that he had repeatedly arrested the disease, and saved trees most violently attacked, simply by opening the soil around the stems, and denuding the tree of a considerable portion of its roots. The cause seems to be a superabundant flow of sap. I had come to that conclusion previous to the communication of my esteemed friend, from the examination I made of the last tree I lost by the blight.

When I first discovered the tree was attacked with the blight, I followed the recommendation of Mr. Lowell, and sawed off all the limbs below the appearance of the disease, and I in vain searched for the "*Scolytus pyri*," or any other insect which could possibly have caused the disease in my tree.

The limbs so sawed off were very soon attacked again, and the whole tree down to the bole, except a graft of another variety, was in a few weeks dead. The graft alluded to still lived, and I have scions growing in another tree, in fine health, set the next spring, taken from that branch of the dead tree. Anxious to discover the cause of the blight, and suspecting there might be a defect at the root, I had the root carefully dug up, and, to my surprise, more numerous and finer roots I never observed on a pear tree.

These facts established in my mind the theory that the blight is caused by a too great flow of sap. I account for the preservation of the graft, by supposing there was an obstruction to a superabundant flow of sap, where the graft was joined, or, possibly, from a difference of texture between the two. If when the sap flows in too great a quantity to the branches, it becomes vitiated and causes the blight, as I believe it does, I am not scientific enough to explain the *modus operandi*.

My friend informed me that he intended to publish an account of his discovery, and promised to send me a copy. I have heard nothing of his having done so. Although I have not had an opportunity to test the efficacy of the remedy proposed, so great is my confidence in the gentleman who has, and it being so consonant with my own views on the subject,

that I do not hesitate to recommend its trial to all who may have trees thus affected.

Your friend,

JOHN A. LAZELL.

Columbus, Ohio, Sept., 1840.

ART. VI. *On the cultivation of the Ranunculus.*

By the EDITOR.

THE ranunculus has long been so famed for its beauty, that it will be unnecessary for us to extol it here. It is admitted to be one of the most compact, symmetrical, and truly splendid flowers of which our gardens can boast. It is, emphatically, a florist's flower; for, although its cultivation is not very difficult, yet its growth has in but few cases been attempted, except by the most zealous florists of England.

In this country very few amateurs or practical men have paid much attention to the cultivation of this flower. A few however have, on several occasions, attempted its growth, and in some situations have succeeded in flowering a larger portion of the roots, in great splendor. The first season of planting, individuals who are unacquainted with the nature of the roots, or who have read nothing upon their growth, are apt to lose the whole, which causes such disappointment, that they seldom give them a second trial. Our object in penning this article, is to supply some information which will induce amateurs to attempt their growth again, and, by giving them more attention, be enabled to succeed in their cultivation.

A bed of ranunculuses has always appeared to us to possess more real beauty than any other flower, not excepting even the tulip. There is such an endless diversity of colors, beginning with pure white, and running through every shade of yellow, red, violet and purple, almost to black; some mottled, others striped, some edged like the picotee, others spotted, marbled, &c. in endless variety. The scarlets are very brilliant, and, for delicacy of tints, nothing can exceed some of the spotted, edged and mottled varieties.

It is now four or five years since we made a practice of cultivating a good sized bed of roots every season: some of our roots were of the very choicest kinds, imported from one of

the finest collections in England, at a high price. We never failed to produce fine flowers, although some seasons the number of the flowers would be greater than in others, which we attributed to the greater or less vigor of the roots, or to the injury they received from the continued duration of the cold weather, which prevented us from giving them an abundant supply of fresh air early in the spring. Our winters are so long, that the roots are in danger of being weakened from confinement, unless they are strong, and set out in due season, when we think no injury will be sustained.

Our climate, during the months of May and June, when they are in full bloom, is too dry; the foliage, just as it attains full vigor, is overtaken by the drying winds of May, and the consequence is that the growth is much checked, the flower stems advance slowly, and oftentimes have not sufficient strength to open their flowers. To prevent this, copious watering, and shading the bed are necessary; and although this will not wholly counteract the injurious effects of a dry atmosphere, yet, if the former is duly administered, and the shading not continued too long, the beauty of the flowers will be enhanced and prolonged, and the growth of the foliage invigorated, upon which the strength of the roots for blooming another year wholly depends.

There has been a variety of opinions among eminent cultivators, in regard to the proper season to plant the roots. Some writers contend that October or November are the best months; others, that February and March are preferable; some, that either of these periods will do equally as well; and some plant every fortnight, so as to have flowers the whole season. In England it is, undoubtedly, of much less consequence at what time the roots are planted, than in this country. The mild winters there will allow of the planting to take place at almost any period throughout the year; but in our climate there can only be two periods, viz., October and November, or March and April. The severe weather of December, January and February will not admit of the roots being put into the soil at that time.

The question then arises, which of the two periods is preferable? Upon this point we have but one opinion, as far as our experience goes: we should certainly plant in the autumn, and for the reason the roots will get established in the bed before winter sets in: they can then be protected by a frame, and in the spring, when the weather is such as to admit of their being uncovered, the roots will immediately come up, and commence a slow and vigorous growth. By this means they get sufficiently advanced by the middle of April, when the frame should be removed, to withstand the heat and drought of spring.

If, on the contrary, the bed is prepared in the autumn, and the roots are not planted till March or April, they then start feebly, and, before they have got good hold of the soil, the warm weather of May overtakes them, and checks their growth, the foliage turns yellow and sickly, and the flowers expand without that freshness of coloring which is the greatest charm of the ranunculus. We have tried both the autumn and spring planting, and when the roots were well protected during winter, we always obtained from them a much more abundant and beautiful bloom than from those set out in spring. An experiment was tried by some eminent florist some years ago, and the weight of the roots from a small bed, planted in autumn, was a pound or two heavier than the roots from one planted in the spring: this we think is conclusive, even in the climate of England, that fall planting is the most favorable to a good bloom.

Having said thus much respecting the season of planting, we shall next treat of the Soil—Situation of the bed—Setting out the roots—Protecting during winter—Watering—Shading—Taking up the roots—Offsets; and Sowing seeds; and concluded with the criterion of a good ranunculus.

Soil.—The best soil for the ranunculus is a rich, mellow loam; but as this is not always to be had conveniently, good garden loam, enriched with *very old* cow manure, or leaf mould, will answer: fresh loam, however, it should be borne in mind, will insure a much better bloom. The beds may be thus prepared:—Dig out the soil to the depth of eighteen or twenty inches; then fill up four inches of the same space with the top soil; on this place a layer of very old cow dung, or decomposed hot-bed manure, of about six inches, and on this ten or twelve inches of fresh loam, being careful that no manure should be mixed with it. The whole should then be allowed to settle for a fortnight or a month previous to the planting of the roots.

Situation of the bed.—The site selected for the bed should be in an open and airy part of the garden, so that the foliage and flower stems will not be drawn up; under or near the shade of trees should be avoided. The bed should not be raised more than one inch above the walk, just sufficient to designate it from the surrounding soil; if elevated three or four inches, the soil will be in such a fluctuating state of dryness and moisture, as to be very injurious to the roots. There should be a walk all round the bed, in order to admit of a near inspection of the flowers.

Setting out the roots.—A great deal of the success attending the cultivation of the flower, is dependent upon careful planting. The roots should be covered just an inch and a half deep

from the crown, and no more or less; for nature has so peculiarly endowed the root, that if placed at a greater or less depth, it will form tubers at precisely the depth of an inch and a half, and thus be so weakened as not to flower well. The best method of planting is, to take off two inches of the surface of the bed; the rows are then marked out each way, and where the lines cross one another at right angles, a root should be set out, pressing it slightly into the soil to keep it in its place. When all are planted, the two inches of soil is replaced; and if the roots are of good size, the distance from the crowns will be just an inch and a half; finish by levelling off the bed. The middle sized roots, with firm tubers, are preferable for planting; and care should be taken to place a little sand under and over each, to guard them against too much moisture.

Protection during winter.—The roots must be protected in some way during winter, as they will not, at least according to our experience, stand our winters without injury. We have always adopted the following plan:—The bed was made just the size of a cucumber frame: when the planting was completed, this was placed on the bed, and if there was danger of heavy rains or severe weather, the sashes were put on; as soon as heavy frosts set in, the whole of the interior of the frame was filled with leaves, and the sashes replaced; these were continued till late in December, when a light covering of straw or leaves was placed on the sashes, and a few boards laid on to keep them from blowing away. In this manner the whole remained until April, or until all danger of frost was over, when the leaves, frame, &c., were wholly removed, and the bed cleared up. The foliage, at this period, will have just shown itself above the soil. We have never tried protection by mere covering alone, without a frame, as we think it necessary to keep off the heavy rains.

Watering.—By the first of May, and perhaps previously, if the season should prove dry, as it often does, the beds will need occasional watering. This should be carefully performed with a fine rose watering pot: give a good quantity at once, every other day, rather than to just sprinkle them every evening. The watering should be continued as long as dry weather continues, but, in the event of refreshing showers, may be left off.

Shading.—Shading is as necessary to flower the ranunculus in perfection as the tulip; the foliage is injured by excessive heat, and the bright colors of the finer varieties are immediately bleached of all their richness, if exposed to the hot sun. An awning may be put up of sufficient height to walk under, or it may only be placed near the bed; but, in either case, it must

be rolled up or taken off at night, to admit the heavy dews: the bed should also be exposed morning and evening, as much as possible, as continued shade would have a tendency to weaken the flower stems and draw up the foliage.

Taking up the roots.—A fortnight after the last flowers have faded, the foliage will assume a yellowish tinge, which indicates the period for taking up the roots: this is a very nice operation, and should not be done hastily, for fear of either destroying or losing the roots: the best way is to pare off three inches of the soil into a sieve, if the bed is composed of mixed sorts, and then, by shaking out the earth, the roots will remain; this we have found the most easy method. When the varieties are named, they must be taken up one by one, and put into a box labelled with the names of each. They must not be placed in the sun, but may be carried to a dry room, where they may remain till the earth is sufficiently dry to shake off easily, when they should be put into paper bags.

Offsets may be treated precisely like old roots; the strongest should be selected for flowering, and the remainder planted out in a bed by themselves.

Sowing the seeds.—We have not given any directions for raising seedlings; they are, however, easily grown. The seeds should be planted in boxes, in January or February, and placed in a frame or the green-house. The soil should be fresh loam, made fine with a small portion of leaf mould. Sow about a quarter of an inch apart, and merely sift over fine earth enough to barely cover the seeds; give a watering through a fine rose, when the whole is completed. In six weeks they will be up; the boxes may be removed to the open air during summer, and the roots should be allowed to remain in the boxes the first year: the second, they may be planted out with the offsets of full grown bulbs.

Criterion of a fine Ranunculus.—We cannot better conclude this article, than by introducing the following account of the character of a first rate flower:—

A good ranunculus should have the stem about eight or twelve inches high, strong enough to support the flower, and quite upright. The form of the flower should be hemispherical, not less than two inches in diameter, consisting of numerous petals gradually diminishing in size to the centre, lying over each other, so as neither to be too close nor too much separated, but having more of a perpendicular than a horizontal direction, in order to display the colors with better effect. The petals should be broad, with entire well rounded edges, their colors dark, clear, rich and brilliant, either of one color or variously

diversified, on a ground of cinereous, white, primrose, yellow, or flame color, or diversified with elegant stripes, spots, or mottlings.

Two of the most extensive cultivators of the ranunculus, at present, in England, are Mr. Groom, of Walworth, and the Messrs. Tyso & Son, of Wallingford; the latter gentlemen have been most successful growers, and have raised some of the finest seedlings ever produced: they have been sold as high as £10 each. Their catalogues contain upwards of five hundred sorts, ranging from 1s. to £5 sterling each; assortments of one hundred fine named varieties may be obtained from £2, 10s. to £5.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

On the foundation and management of borders for fruit trees.—Probably no subject connected with the growth of fruit trees is less understood than the proper preparation and management of the soil in which they are to grow, whether in borders particularly prepared for that purpose, or in the open garden, for standard trees. It is our belief, that of all the fruit trees which fail to produce a due quantity of good fruit, more than two thirds of them may be attributed to the condition of the soil in which they are placed. Locality is more thought of than the state of the soil, and when a tree fails to produce its accustomed crop, the tree is set down as worn out, or else the locality is so unfavorable, as to render it scarcely worth while to continue its cultivation. The fault, however, we have long been inclined to think, is not in the peculiar situation of the tree, but rather in the condition and state of the soil in which it is placed.

The production of fruit on walls and espaliers is attracting more attention than heretofore; the beautiful specimens of pears, &c., which have been obtained by some gentlemen from trees planted as espaliers, have attracted much attention, and have induced some, who have failed by the ordinary method of cultivating trees, to attempt their growth upon walls and trellises. We are glad to see the subject is receiving more attention, as we are confident it will be the means of procuring specimens of fruit, such as have rarely been seen. The preparation of the borders for the trees is therefore a subject of some consideration, and any information which can be obtained will be read with much interest.

The following remarks, on preparing and managing fruit tree borders, is taken from the London *Horticultural Transactions*, and is one of the most valuable papers which has appeared in the work. It is

by Mr. George Drummond, gardener to Sir Robert Preston, Bart., and was read to the Society in the spring of 1835. We have not room to publish the whole of the article, but we give the most interesting parts of it to our readers, and bespeak for it an attentive perusal, convinced that every cultivator of fruit will glean from it much information which should be treasured up.

"The attention of Mr. Drummond seems to have been particularly directed to the subject of this memoir, by the following circumstances. The property of Valley Field, which belonged to the late Sir R. Preston, is situate on the north side of the Frith of Forth, and possesses a fine southern aspect. The site of the cottage garden, in which Mr. Drummond's experiments were first made, is placed close on the Frith, and was previously occupied by pans, and all the other buildings required for the manufacture of salt. In 1815 and 1816, these buildings were removed, the ground was enclosed by a wall, a cottage erected, and one part of the enclosed area was laid out as a flower garden, and the remainder formed into a marine fish-pond.

"When the ground was levelled for the garden, it consisted almost entirely of coal ashes, brick-bats and lime rubbish, to which were added about fifteen inches of fresh soil, to prepare it for the flowers and shrubs. As it was proposed to plant French pear trees in the borders next to the walls, the fresh soil was there trenched down about eighteen inches, and mingled with the rubbish. Another foot of fresh soil was then laid over the whole surface of the border, and the trees planted.

"It was predicted that a border so formed would never answer, but would assuredly canker the roots of the trees; this, however, has not happened. On the contrary, the crassane, St. Germain, Chaumontel, colmar, brown beurré, bergamotte de paques, and jargonelle, all produced fruit the third year after they were planted, and have continued to yield excellent crops ever since, far greater than similar trees planted in the deep rich borders of the other gardens. Of these latter trees, many had been planted twelve years before they produced any fruit: they grew, however, vigorously, ran greatly to breast wood, and continued to grow so late in the season, that the flower buds were frequently but ill formed and the young wood imperfectly ripened. The fruit also, which they produced, was borne chiefly at the ends of the branches, and was frequently hard and gritty at the core. On the other hand, the trees in the cottage garden seem to have acquired a different habit; they did not, indeed, grow so vigorously, and they produced little breast wood; but they ripened their young wood earlier in the autumn, and fruited more regularly over the whole surface of the tree. On a given surface of wall, therefore, not only was the produce of the cottage garden tree greater, but its quality much superior.

"The early productiveness and fertile habit exhibited by the trees just mentioned, led to the adoption of nearly the same methods in preparing two other borders. One of these was formed in 1820; as much of the rubbish of old buildings as would form a layer of about fourteen inches in thickness, was spread over the whole border. On this was laid a stratum of rich manure, about six inches thick, and the whole was then trenched and turned over in such a way as to mingle the rubbish and manure with the soil of the border, but not going so deep as to encroach on the subsoil. The whole being thus mixed together, and made level, was then covered with about one foot of fine light soil. In the border thus formed, two crassanes, two French

bergamots, two gray auchans, and one muir fowl egg pear were planted; they were what are generally called 'dwarf maiden plants.' All these trees showed fruit in the third year, and bore a beautiful crop in the fourth year after they were planted, and the crops produced every year since have been astonishing. The surface of this border every winter gets a dressing of cow dung, which is dug in about eight inches below the surface.

"In 1822, another border was similarly prepared by mixing up the rubbish of an old wall with the soil of an old border, to which no dung was added, lest it might make the soil too rich; but this Mr. Drummond has since regretted, as he finds that where stones and rubbish are mixed with the soil, there is no danger in making a free use of rich manure. In the spring of 1823, French pear trees were planted in this border, and they afterwards came as early into a bearing state, and continued to be as productive, as the trees at the cottage garden.

"By thus mixing stones and rubbish with the soil of the border, and forming the border above the subsoil, we are able to bring French pear trees into a bearing state at a much earlier period of their growth, and to render some varieties of these trees, hitherto considered as shy bearers, not less productive than those of the more common kinds.

"Mr. Drummond next points to the analogy between his method of forming borders for pear trees, and that employed when plants are cultivated in pots or boxes. In the latter, pieces of potsherds, shivers, or other substances, are laid at the bottom of the pot to drain off superfluous moisture, or are sometimes mingled with the soil of the pot or box, when they are of large size, else the fibrous roots of the plant would probably perish during the winter, when vegetation is suspended. Now the roots of wall trees, in an artificially prepared border, are in a very similar state, if the soil be deep, and no stones or rubbish mingled with it: for a great body of fine earth, without such admixture of stony substances, is too retentive of water during the winter months, which proves very injurious to the fibrous roots of trees in our cold damp climate.

"Many opportunities of lifting the roots of trees, in borders differently formed, have afforded illustrations of the foregoing facts; for those roots raised from borders where the soil was mingled with stones and rubbish have presented a dense mass of fibrous rootlets; whilst others, which had grown in deep and rich borders without such admixture of stony substances, have exhibited only long naked roots, more or less destitute of fibrous appendages. In the rubbish borders, the fibrous rootlets might be seen to seize, as it were, on some substances of the soil in preference to others; pieces of lime plaster, or mortar, were generally preferred, being often found enveloped in a mass of such rootlets; next to these, pieces of whinstone and brick were selected by the rootlets; coarse gritty sandstone they seemed to reject, but to like the fine white sandstone which the roots of heaths are so fond of.

"In connection with this search after stony bodies, Mr. Drummond mentions some curious facts respecting the directions which roots take in borders formed, in part, of paving stones. If such stones be laid at the bottom of the border, with a view of preventing the roots striking into the subsoil, the trees will soon send down their roots until they come in contact with the pavement, over the surface of which they will then spread themselves in every direction. Should their extremities not be able to penetrate the mortar or clay, in which the

stones are imbedded, they will, after a time, push out beyond them, and then, dipping down, take an inverted position, and extend beneath the pavement. On the other hand, if the stones be laid on the surface of the border, instead of its bottom, the roots then seem to strike upwards, and spread along the under surface of the stones. In both cases the stones seem to attract and retain moisture, and, during the vegetating season, the roots strike towards them in order to obtain it; but with this difference in the ultimate result:—when the stones are laid at the bottom of the border, the principal roots are detained there, and their fibrous rootlets are more or less destroyed, during the winter, by the too great moisture to which they are exposed; in such circumstances, the trees grow vigorously, but produce comparatively little fruit, and that of inferior quality; but when the stones are laid on the surface, the principal roots are also formed there, and their fibrous rootlets are thus preserved in a healthy state during winter; such trees grow less vigorously than in the former case, but they produce excellent crops of fruit, and that of superior quality.

“From the results of his experience, the author is led to conclude that two errors are, in general, committed in forming borders for wall fruit trees. The one is, that of trenching too deeply, with a view of increasing the depth of the border, by which the subsoil is disturbed; the other consists in collecting too great a body of fine earth in the border, without a due admixture of stony substances.

“With respect to the first error, or removal of the subsoil, its effect is to convert the border into a sort of receptacle, both for collecting and retaining water, and to bring it nearly to the condition of a flower pot whose bottom is immersed in a pan of water. No operation of draining will keep such a border in a condition suited to the welfare of the trees; and nothing can be more injurious to the roots than keeping them in stagnant water through the greater part of the year. If it be wished to augment the depth of the natural soil in the borders, this should be done, not by excavating the subsoil, but by adding to the height of the upper soil. All hard-wooded trees and shrubs thrive best in a border raised above the level of the surrounding ground. In our damp climate the roots of the finer sorts of trees thus preserve a healthier state during winter; and on the return of spring, the soil of a raised border receives more solar heat, which contributes to accelerate and augment the fertile habit of the tree.

“As to the second error, that of accumulating too much fine mould, without a due proportion of stony substance, Mr. Drummond remarks that, in the natural soils in which trees best grow, we can seldom penetrate, even in carse lands, above one foot below the surface, without meeting with stones and other substances favorable both to the development and preservation of fibrous roots; and in local situations, famed for the production of fine fruit or hard-wooded trees, an examination of the soil and subsoil will show them to possess the characters above-mentioned, and to be thus favorable to the formation and preservation of fibrous roots. In no instance ought we to collect above two feet of fine earth in a border, without, at the same time, mixing with it a due proportion of small stones, or other solid substances. Such an intermixture of stony bodies contributes not only to augment the number of fibrous roots, but to prevent the accumulation of too much moisture in the winter months.

“As the result of his inquiries and experience, Mr. Drummond recommends the following mode of forming a border, as suitable for every variety of fruit tree which we are in the custom of raising against

walls. He would make the border at least twenty feet wide; it should be composed of two and a half feet in depth, of good soil, rather light, with one foot of broken whinstones and lime rubbish, and one foot of cow and stable dung. These several ingredients should be thoroughly mixed together, and, when the whole has been levelled, another foot of fine mould should be spread over the whole surface. The walks he would lay down on the surface of the border, at the distance of ten or twelve feet from the wall; and this should be done in such a manner as that the surface of the border may have a gentle slope from the wall to the walk, and the slope then be continued from the walk to the natural surface of the ground. On no account must the subsoil be disturbed.

"Those who are advocates for the shallow planting of fruit trees may suppose the border recommended above to be too rich, and that it will promote too great luxuriance of growth; but, provided the materials employed favor the production of fibrous rootlets, we can hardly ever make the border too rich. Encouraging such rootlets seems to produce that fertile habit in the tree at an early stage of its growth, which checks any tendency to over-luxuriance afterwards, and to turn the powers of the tree to the formation of flower buds, and consequent production of fruit. Wall trees are exposed to a higher temperature and greater evaporation than standards, and require, therefore, a larger body of soil, and a more copious supply of moisture for their roots than standards do."

Mr. Drummond then proceeds to notice some other circumstances to be attended to in their management, such as the application of moisture to their roots, &c., and he illustrates his views by an account of actual experiments. Water from a pond, where it has been exposed to the sun, should be used; and the following experiment shows the great advantages to be gained by the use of such water, in preference to water from wells. The result is thus stated:—

"The first experiment was made on the 10th of May. At the depth of eighteen inches the temperature of the border was sixty-four degrees, and that of the spring water used, forty-six degrees. In twenty-four hours after, the temperature of the border was reduced to fifty-two degrees, or had lost twelve degrees. At the same time the temperature of the soil being sixty-four degrees as above, and the heat of the pond water sixty-seven degrees, the soil at the close of twenty-four hours was sixty-six degrees, or, instead of losing twelve degrees, had gained two degrees.

"June 20th, the second watering was given. The temperature of the border, at the depth of eighteen inches, was now seventy-four degrees, and that of the spring water fifty-two degrees. In twenty-four hours the border was reduced to fifty-eight degrees, or had lost sixteen degrees. At the station where the pond water was used, the temperature of the border at the above-mentioned depth was seventy-seven degrees, and that of the water eighty-two degrees. In twenty-four hours the temperature of the border was eighty degrees, or had gained three degrees.

"The third and last watering was performed on the 28th of July. The temperature of the border at eighteen inches below the surface was seventy-two degrees, and that of the spring water fifty-seven degrees. In twenty-four hours the border was reduced to sixty-one degrees, or had lost eleven degrees of temperature. At the pond water station, the border at the depth of eighteen inches was seventy-eight degrees, and the water itself seventy-four degrees. In twenty-four

hours the temperature of the border was still seventy-eight degrees, or had suffered no change of temperature from the watering it had undergone.

"It is very clear from these facts, that, whilst spring water greatly cooled the soil, that from the pond exerted no such operation, but, on the contrary, often raised its temperature."

The remainder of the article is as follows:—

"In proceeding to describe the effects on vegetation produced by these different kinds of water, Mr. Drummond observes, that on the 10th of May, when the border was first watered, there was no perceptible difference in the appearance of the four trees: they had all excellent crops of fruit. About the first of August, however, the contrast was very striking. No one would then have supposed that the four trees were of the same variety. The fruit of the two trees, which had been supplied with the pond water, was much larger, of a higher color, and finer quality, than the fruit of the other two trees which had been supplied with spring water. The leaves, also, of the former trees were almost double the size of those of the latter. Even in the following spring the difference was perceptible, as evinced in the larger blossom and more vigorous setting of the fruit.

"In the management of borders, it is of great importance, (continues Mr. Drummond,) to preserve the surface roots of trees. At the cottage garden the borders have never been dug since the trees were planted, and when manure is applied, it is laid down and covered over with about six inches of the surface mould. The soil, when thus treated, becomes filled to the surface with fibrous roots, which would be injured or destroyed were the border to be dug. When the manure is retained in a body near the surface the border is kept in a moister state, and the roots do not penetrate downwards to the subsoil in search of water. Even where vegetables are raised as early crops on the border, the soil is never disturbed to more than six inches in depth; and the crops are ready earlier than in the ordinary mode of digging to the depth of eighteen inches. When the fibrous roots of trees have been injured by digging the border too deep, they will soon be restored, if a layer of manure, six or eight inches thick, be first laid on the surface, and then beaten down with the spade, and covered afterwards with about six inches of mould. The roots will at once begin to strike out and run along the under surface of the dung, forming at length a complete mass of fibrous roots.

"When vegetables are raised on fruit borders, they may affect the atmosphere, in regard both to heat and moisture, in a degree that may sometimes prove beneficial, and at others, injurious, to the trees. When the wall, for example, becomes heated, the air in contact with it is rarified and carried upwards, and fresh air from the surface of the border moves forward to supply its place; in this way a current of air is soon formed, which continually passes over the heated wall as long as it retains an excess of heat. Of this circumstance advantage may be sometimes taken where the heat of the wall is excessive; for, by keeping the surface of the border in a moist state, we diminish at once the temperature, and augment the moisture of the atmosphere which envelopes the tree. On the other hand, by raking the border, as will afterwards be shown, we contribute to keep its surface in a dry state, and thereby to increase the temperature, and lessen the moisture of the surrounding atmosphere. At different seasons these opposite practices may be beneficially adopted. Thus in spring, when the trees are in blossom, should a clear frosty night set in, with

the prospect of bright sunshine during the next day, it is of no little importance to water the surface of the border before the sun appears, as the evaporation that succeeds will moderate the excess of heat which might otherwise prove fatal to the blossom. On the other hand, when the fruit is swelling it is of equal importance to keep the surface of the border dry, as the temperature, both of the soil and atmosphere, is then increased, which contributes much to improve the size and quality of the fruit.

"Vegetables, in borders, are least injurious to wall trees, when they are planted in rows at right angles to the wall, and at double the distance usually allotted; they do not then so completely shade the soil, and the air is permitted to flow freely through the rows. It will, however, be proper to have them cleared away, (when planted opposite to peach and apricot trees,) about the middle of July, that the borders may have the full benefit of the sun's rays, to enable them to ripen the fruit and mature the young wood. After a wet night the borders should also be raked, to aid the drying of their surface. This simple operation will increase the temperature of the surface of the border, and of the wall, many degrees. On one occasion, after two days of continued rain in July, 1829, the temperature of the surfaces of the border and wall was the same as that of the atmosphere, viz. fifty-two degrees, at four o'clock in the morning. At six o'clock the weather cleared up, and a considerable extent of the border, opposite to a hot wall, was raked, so as to dry the surface. At one o'clock, a thermometer, laid on this raked surface, indicated one hundred and eighteen degrees; and another, applied to the wall opposite, one hundred and six; while, on the unraked surface of the soil, the temperature was only eighty-six degrees, and on the corresponding portion of the wall, eight-nine degrees. The operation, therefore, of raking the surface of the border, raised its temperature thirty-two degrees above the unraked surface, and the temperature of the corresponding part of the wall, seventeen degrees.

"The London medal, for 1833, placed at the disposal of the Caledonian Horticultural Society, was voted to Mr. George Drummond, for the communication, of which a copious and correct abstract is here given."—(*Hort. Transactions*.)

Green Gage Plum.—This is, without doubt, not only the best desert plum, but also the most esteemed for the better description of preserves. Its origin is undoubtedly French, and it is said to have been introduced into England by the noble family of Gage, some time about the beginning of the last century, as we find it described by Langley in his *Pomona*, as ripening on an east wall, July 30, old style, and supposed by Bradley, in 1757, to be the same as his *Gros Damas Verd*, which shows this plum was even then not generally known. Sir Joseph Banks was of opinion that it was received from the monks of Chartreuse, of Paris, among other fruit trees, by the then Lord Gage, and that the label by accident had been lost. The gardener, having no other name for it, very naturally, after it had produced fruit, named it *Green Gage*, in compliment to his employer, a name it is now as well known by as that of *Reine Claude*, (its name on the continent,) where it is equally esteemed as with us. The name *Reine Claude* was given it on account of its being introduced into France by Queen Claude, wife of Francis I., of that country.—(*Floricultural Magazine*.)

ART. II. Domestic Notices.

Echinocactus Eyriésii.—The following is a continuation of the memoranda of the flowering of this interesting plant in the greenhouse of Mr. Francis Putnam, which have been inserted in pages 227 and 272 of the present volume of this Magazine:—

Saturday, July 25, the seed vessels burst open, containing a very great number of minute, black, roundish seed. A few days prior to this date, the plant was brought into the green-house from out doors, where it had been kept nearly a fortnight; at that time the buds, which had been for some weeks visible, began to swell, and also several others made their appearance, until Thursday, Aug. 6, when the growth became very rapid, and on Sunday, Aug. 9, in the evening, two buds expanded their beautiful and fragrant flowers; the other buds were soon after dropped, and, since that time, all appearance of flowering has ceased. The number of flowers expanded on this plant, during the season, has been seven—three on Friday, April 24, two on Thursday, June 11, and two on Sunday, Aug. 9.—*Y., Salem, Oct., 1840.*

The Mexico apple.—Some time since we received from a lady in Canterbury, Conn., some specimens of an apple, accompanied with other fruits, under the name of Mexico apple. The fruit is one of the very best of the autumn varieties, of large size and handsome appearance, resembling, in shape, somewhat the pearmain. We presented our correspondent, Mr. Manning, with a specimen or two of the fruit, and he pronounced it a very superior variety, and quite new to him. From the circumstance that it was unknown to most fruit cultivators, we requested some information respecting the variety, whether it was supposed to be a native, or of foreign origin. Through the kind attention of our correspondent, we learn the following facts in relation to this fruit:—

The Mexico apple was first brought to the town of Canterbury, Conn., about sixty years since, by a Methodist clergyman from Rhode Island. The gentleman who is knowing to this was born and brought up in the town, but afterwards removed to Litchfield, where he now resides, and from whom this statement was obtained, and he subsequently took with him some of the scions to graft other trees; these trees have long been in bearing, but the fruit is not so large and fair as that produced in Canterbury. The first trees known to our correspondent were in Canterbury; this was about thirty years ago, and the trees were then of very large size. For a long period there were no others in the town, and the owners of the tree often sent the fruit to their friends, and occasionally invited them, when it was ripe, to come and join them in a feast of Mexico apples.

The late Dr. Harris, of Canterbury, who had a farm upon which was a great variety of good fruit, and from whence the specimens were obtained which we received, esteemed the Mexico apple as one of the finest varieties he possessed. He took particular pains to have a good number of the trees, and there are now probably growing upon the farm (now in the possession of his family,) a dozen or more, in full bearing state. The fruit appears to vary much in different situations, according to locality, soil, &c., and Dr. Harris, in selecting his scions, took them from only such trees as produced fair and full sized fruit. By pursuing this course, the trees which he grafted produce apples of better quality than any other in the neighborhood of Canterbury.

The apple is a large red fruit, about the size of the Baldwin, though more in shape of the old pearmain: we doubt not, from what we have learnt by extensive inquiry, that it is not known to nurserymen, and is not found in their catalogues. If, on some farther inquiry, this should prove true, we shall endeavor to introduce it to the notice of cultivators, and endeavor to get a more authentic account of the tree, in order to ascertain whether it is a native variety.—*Ed.*

Seedling dahlias.—My seedling dahlias were all killed by the frost on the 17th inst. I have saved one hundred roots of the most promising for flowering next year, and if they prove to be any thing equal to what they have been this season, you may expect to see some as fine ones as the Hero of Tippecanoe. There was something very singular about them: there were from eleven to thirteen hundred plants; they nearly all flowered, and I do not think there were over two to the hundred with single flowers.—*Yours, T. Hancock, Burlington, N. J., Oct., 1840.*

[Mr. Hancock pursues the right course to procure new varieties. It is of very little use to plant a few seeds, and raise fifty, or perhaps one hundred plants. The chance is so small, in such a limited number, of obtaining a good flower, that the experiment only ends in disappointment. But when ten or twelve hundred plants can be grown in one season, and from one sowing, there is some probability that a dozen of good varieties may be selected out. Seedlings may be almost as easily raised as potatoes, and by giving them common field cultivation, is all that is necessary; all that promise well the first year may be tried a second, and the refuse thrown away. When grown a second season their merits will be apparent, and the selection may be then made of varieties deemed worthy of permanent cultivation.—*Ed.*

Worcester Horticultural Society.—We are glad to have it in our power to state, that a Horticultural Society has been formed in the town of Worcester. The first meeting was held on the 19th of September, a constitution was adopted, and the following officers chosen for the ensuing year.

Dr. John Green, *President.*

Dr. Samuel B. Woodward, Stephen Salisbury, *V. Pres'ts.*

Dr. John Park, Isaac Davis, E. F. Dixie, S. D. Spurr, T. Chamberlain, Nathaniel Stowell, A. D. Foster, Lewis Chapin, J. G. Kendall, Emory Washburn, *Trustees.*

William Lincoln, Dr. Joseph Sargent, *Cor. Secretaries.*

Benjamin Heywood, L. L. Newton, I. C. B. Davis, *Rec. Sec'ries.*

An Exhibition was appointed to take place on the 13th, 14th, and 15th of October, at the Town Hall, and various committees were chosen to carry the same into effect. We were present at the exhibition, and feel much gratification in saying it was worthy of the town, and reflected great credit upon the gentlemen who were foremost in forming the Society. As we shall give a report of the exhibition, in our December number, we shall not remark upon the same here, otherwise than to say, that if the first exhibition is any index of the future shows, they will be very splendid. Premiums were awarded for the best specimens of apples, pears, grapes, flowers, and vegetables. Several amateurs and gentlemen, around Boston, contributed very liberally to the display of flowers and fruits.—*Ed.*

Great crop of Tippecanoe pumpkins.—In our last volume, (V., p. 433,) we noticed the great crop of pumpkins, produced from two seeds only, in the garden of E. H. Derby, Esq., Salem, Mass. This season

Mr. Derby planted several rods of ground with them. The seeds were sown about the middle of May, in hills, nine feet apart, with a good allowance of manure in each hill. The vines grew very luxuriantly, and the whole ground seemed to be literally covered with pumpkins. Some of the largest weighed one hundred and sixteen pounds each. In order to ascertain the weight of the whole crop, Mr. Derby sent one wagon load to the public scales, and found the weight to be one thousand eight hundred and ten pounds. The same wagon was used to put in the remainder of the crop, and was filled in the same manner as the one sent to be weighed. There were twelve loads, and part of a one, weighing five hundred pounds, making, in the whole, twenty-two thousand two hundred and twenty pounds, or at the rate of fifty thousand seven hundred and eighty-eight pounds to the acre. The fruit appears richer, the meat much thicker, and the shell softer than the common pumpkin, and are admirably adapted to the feeding of stock. Mr. Derby has kindly offered to furnish seed to any person who may wish for them.—*Ed.*

Ancient pear trees.—The old pear tree, planted in 1628, by Gov. Endicott, on his farm in Danvers, is yet in full life, and has this year produced a good crop of pears. It is a Bon Chretien.

In Eastham, Cape Cod, is another pear tree, planted in 1640, by Gov. Prince, in his garden. It is a flourishing lofty tree, and produces, on an average, fifteen bushels a year.—(*Newspaper.*)

In Sandwich, Cape Cod, we noticed, the last part of August, a very large and flourishing pear tree, which, to all appearance, we judged to be from one hundred to two hundred years old. It is fifty feet high. It produced a considerable quantity of pears the past season, and we tasted the fruit. It appeared to be a Bon Chretien, and probably may have been brought from Eastham. Upon a close examination of the tree, however, we could not discover any appearance of its having been grafted. It may, possibly, be a seedling variety.—*Ed.*

Destruction of Mr. Thorburn's green-house by fire.—Mr. Thorburn's new green-house and conservatory, at Astoria, L. I. was consumed by fire on the morning of the 31st of October, together with the whole collection of camellias, consisting of eight hundred plants, besides a large and miscellaneous collection of other plants. Some account appears in a previous page, of Mr. Thorburn's establishment, as lately filled up, and we regret to learn the destruction of so large a number of camellias, among which were many specimens which cannot be replaced.—*Ed.*

The Exhibition of the Brooklyn Horticultural Society took place the early part of October. We are sorry to learn that but very little interest was manifested by the members in the exhibition, and that the display was not so fine as was anticipated. We also fear, from information derived from a gentleman connected with the Society, that it will be hardly possible to sustain it under any circumstances. Mr. Becar, the President, has been indefatigable in his exertions to keep up the interest, but, notwithstanding his efforts, every thing has proved unavailing. We exceedingly regret that this is the case, and we yet trust that one more effort will be made to prevent the Society from becoming extinct.—*Ed.*

Horticulture in the District of Columbia.—Horticulture, in this District, is far behind Massachusetts. Still there is a spirit of emulation arising among the principal amateurs and practical men, which will have a good tendency to spread a taste for plants. There was

an exhibition of the Columbian Horticultural Society, in Washington, the latter part of September, which went off very well. Mr. Buist produced some very fine dahlias: he is doing much business in plants. My employer, Mr. Robinson, is making many improvements, and is adding many choice fruits and fine plants to his collection.—*Yours, W. Young, Georgetown, D. C., Oct. 15, 1840.*

Salvia Tendrei.—We have now, (Oct. 28th,) notwithstanding several severe frosts, in perfect bloom, a fine plant of this newly introduced and showy species of *Salvia*. It is a very hardy annual. The seeds were sown in May, in a frame, and the plants removed to the border in June, where they made a vigorous growth. In September, the plants commenced throwing up their flower stems, though some of them did not appear until October. The plants grew stocky at the root, and spread their leaves upon the surface of the ground; the flower stems are thrown up from ten to fifteen inches long, with small laterals, and terminated with spikes of deep blue flowers, six inches in length. This plant is almost the only one whose flowers remain wholly uninjured by the weather, up to this time, and on this account it is a most desirable one for the garden. In the bouquet, the spikes of rich blue flowers are a fine addition, especially at this season of the year, when there are so few things in the open garden of any beauty.—*Ed.*

The wonderful Californian wheat.—Another subject for humbug and speculation has been revived, (though said to be entirely new,) in an article called the Californian, though undoubtedly properly, the Egyptian wheat. A correspondent of the *American Farmer* communicates the following information, which he says he received in a letter from a gentleman in South Carolina. The wheat was brought to South Carolina from the Osage nation, by Col. Spieren, who had been sent to them, as a commissioner, by the President of the United States. Mr. Spieren brought seven heads: he gave the writer one, and he then offered him five dollars a head for the other six; he, however, afterwards gave him the six heads to cultivate, on condition that he would give him half of the crop. He sowed the wheat on the 2d day of January, 1840, in drills eighteen inches apart in the drill; every seed came up, and each seed produced a stool of from twenty to fifty stems or straws. Each head of wheat contained one hundred to one hundred and fifty seeds, and there were about ten thousand heads produced from the six planted; the wheat was planted so late that it was injured by heavy rains; but it was, notwithstanding, very strong. and those who saw it speak of it as "indescribably grand."

The cultivator offers the wheat for sale at five dollars (!) a head. Now Mr. George B. Smith, and other able gentlemen, pronounce this wheat as nothing more than the Egyptian wheat, an "exploded humbug," and it is now only brought up again, to cajole the honest farmer out of his money, and induce him to cultivate this worthless variety. The two thousand heads, at five dollars each, would amount to a neat little sum, only ten thousand dollars. Every farmer who tries it will not only lose his money, but his labor also.—*Ed.*

Norton's Virginia seedling grape.—A gentleman in Manchester, Virginia, offers for sale several hundred roots of this new, and, said to be, "splendid, and deservedly popular" variety. "It possesses, in an eminent degree, the following qualities:—it will endure any climate of our country; it grows very rapidly; it is

a most abundant bearer, and always perfecting all the fruit formed in the spring; is esteemed equal, if not superior, to any other in the United States, for making wine; and, when perfectly ripe, is the most delicate and delicious grape for the table I have ever tasted." Orders addressed to Mr. L. M. Burfoot, Manchester, Va., will meet with attention, and the vines forwarded to the direction required.—*Ed.*

Premium for the destruction of the rose slug.—Will the discovery of a remedy of this pest cover the mischief done to this fine plant? A new foe seems to have come in to its work of destruction this season, in the form of a small green fly, a thrips, perchance. Have you seen it? Such an insect has done me more mischief than the old, slimy, black, rosebush slug.—*X.*

Quere.—I have noticed, on the tables of the Massachusetts Horticultural Society, a new species of dahlia, (*D. repens*;) a poor name, by the way. Could you refer me, Mr. Editor, to any description of the species? A republication of such a description, if to be found in any English work of floriculture, would be gratifying to—*An Admirer of new flowers.*

Vineyards in Cincinnati, Ohio.—Mr. Longworth, of Cincinnati, has long been a cultivator of vines, and has manufactured some very superior wine. He has one vineyard, leased to Mr. Mottier, who is his own *vigneron*. It is kept in fine order, every thing neat and business like. There are about seven acres planted, only two thirds of which are yet in bearing. The varieties found to suit best are the Catawba, Isabella and Black Cape. [Is the latter a native? if so, it is wholly unknown here.—*Ed.*] The two first Mr. Mottier finds to be not such regular bearers as the last, but always produce a part crop, and about every third year a full one. The Cape rarely misses a fair crop, but the wine requires age, and when kept seven or eight years, almost equals the Catawba. The Isabella makes good wine, and is best used the second year, when it is somewhat of a *sweet wine*. The Catawba is decidedly the best grape for wine-making, being on an average very productive, the yield of juice unusually great, and the wine, at three years old, superior to any Madeira, wanting its fiery taste, and surpassing it in richness and flavor. Its body is such, that there is little doubt it could be transported any distance without any necessity for the *reinforcement* which foreign wines receive, previous to being shipped.—(*Western Farmer and Gardener.*)

ART. III. *Massachusetts Horticultural Society.*

Saturday, Sept. 26, 1840.—An adjourned meeting—the President in the chair. Prof. J. L. Russell was admitted a corresponding member of the Society.

A report was read by the chairman of the Library Committee. The

report stated that the committee had procured, or made arrangements to procure, the following works:—

MacIntosh's Flower Garden, Green-house and Orchard, 3 vols.—Kollar on Insects, 1 vol.—Iconography of the Camellia; in folio numbers, monthly: by the Abbe Berlése.—Loudon's Arboretum et Fruticetum Britannicum; 8 vols. 8vo.—Loudon's Suburban Gardener; 1 vol. 8vo.—Loudon's Encyclopedia of Cottage and Village Architecture; 1 large vol. 8vo.—Repton's Landscape Gardening; 1 vol. 8vo. By J. C. Loudon.—Mrs. Loudon's Flower Garden of Ornamental Annuals; 1 vol. quarto.—Audubon's Birds of America; in semi-monthly numbers.—Catalogue of the London Horticultural Society, last edition.—Loudon's Gardener's Magazine, vols. xv. and xvi., for 1839 and 1840.—Amounting, in all, to about one hundred dollars, exclusive of Audubon's Birds of America, which will cost twenty-five dollars, yearly, till completed. The report was accepted, and, there being no other business, the meeting dissolved.

Exhibited.—Fruit:—From F. Tudor, from his garden at Nahant, the following pears, remarkable for their beauty and size, viz:—Bisfum, Pope's Quaker, Bezi Vaet, Bleeker's Meadow, Belle et Bonne and Napoleon: the tree from which the latter were taken was removed on the 27th of April, and the tree carried twenty miles to where it is now growing, at Nahant; it is six or eight feet high, and full of fine wood, having been trained as an espalier; also russet Gourmand apples. From S. Kidder, Medford, very fine Catawba grapes. From B. Guild and H. J. How, Isabella grapes.

From the President, Mr. Vose, yellow rareripe and orange clingstone peaches. From S. Walker, pears, without name; also, Burnett pears, received from Dr. Burnett, of Southborough. From S. Downer, Catawba, Isabella, Pond's seedling, and Miller Burgundy grapes. From S. G. Coolidge, Watertown, apples without name. From William Hurd, Newton, blood peaches, quinces, and two kinds of apples, supposed the spice and Harvey.

Oct. 3.—*Annual meeting for the choice of officers.*—The annual meeting for choice of officers, for the ensuing year, was held this day, agreeably to the constitution of the Society. Mr. Walker, from the committee appointed to nominate a list of candidates for the ensuing year, reported a ticket, which was accepted. The members then proceeded to ballot.

Messrs. Grosvenor and French were appointed a committee to sort and count the votes. The whole number cast was thirty-two, and the following gentlemen were elected officers of the Society for 1841, viz:—

President, M. P. Wilder.

Vice-Presidents.—William Oliver, B. V. French, Jonathan Winship, C. Newhall.

Treasurer.—Samuel Walker.

Corresponding Secretary.—R. T. Paine.

Recording Secretary.—E. M. Richards.

Council.—S. Downer, A. Aspinwall, T. Lee, William Oliver, Jonathan Winship, B. V. French, E. M. Richards, L. P. Grosvenor, P. B. Hovey, Jr., R. Manning, O. Johnson, W. Kenrick.

Prof. of Botany and Vegetable Physiology.—John Lewis Russell, A. M.

Prof. of Entomology.—T. W. Harris, M. D.

Prof. of Horticultural Chemistry.—S. L. Dana, M. D.

STANDING COMMITTEES.

Committee on Fruits.—R. Manning, chairman; B. V. French, William Oliver, S. Downer, P. B. Hovey, Jr., L. P. Grosvenor, W. Kenrick, J. A. Kenrick, S. Pond, J. L. L. F. Warren, O. Johnson.

Committee on Flowers.—C. M. Hovey, chairman; D. Haggerston, Joseph Breck, S. Sweetser, S. R. Johnson, W. E. Carter, Josiah Stickney.

Committee on Vegetables.—S. Pond, chairman; P. B. Hovey, Jr., Rufus Howe, John Hovey, A. D. Williams, Joseph Breck, J. A. Kenrick.

Committee on the Library.—T. Lee, chairman; R. T. Paine, William Oliver, C. K. Dillaway, C. M. Hovey, R. Manning.

Committee on Synonyms of Fruit.—R. Manning, chairman; S. Downer, E. M. Richards, W. Kenrick.

Executive Committee.—M. P. Wilder, chairman; William Oliver, B. V. French, E. M. Richards, C. M. Hovey.

Finance Committee.—E. Vose, chairman; W. Oliver, B. V. French.

Mr. Vose, in retiring from the chair, which situation he had occupied for six or seven years, expressed his gratification in leaving the Society in a state so much more prosperous than when he first entered upon the duties of his office. At that time, the treasury was completely exhausted, and the Society in debt—now, it was in a prosperous condition, with a surplus fund fully adequate to its present wants. He also expressed to the members the gratitude which he felt in being so well sustained in his efforts to serve the Society to the best of his ability. In taking his official leave of the Society, he bade them farewell.

The President elect, Col. Wilder, then took the chair. The honor, to him, he said, had been unexpected, and he felt that a task had devolved upon him, to fulfil the duties of the office, after the untiring efforts of the able gentleman who had preceded him. If, however, the members would give him their indulgence, he would endeavor to discharge his duties in such a manner as to serve the ~~the~~ interests of the Society.

P. Wainwright, Jr. was admitted a subscription member.

The meeting was adjourned for three weeks, to Saturday, October 24th.

Exhibited.—Flowers:—The exhibition of dahlias, at this meeting, was remarkably fine. The weather, during the week, had been cool, with a cloudy sky, and frequent refreshing showers, which brought out an abundance of superb flowers: consequently, the exhibition was far finer than we had ever previously seen it, at the room. The following cultivators contributed to the display.

From S. Walker, upwards of a hundred flowers, many very fine, and a few extra, viz: Fire-ball, Suffolk Hero, Dodd's Mary, and Eva. From M. P. Wilder, about a hundred blooms, many of them new and fine, particularly Yorkshire Hero, Ben Johnson, Maresfield Hero, Premier, Topaz, &c. From J. Stickney, sixty flowers, among them Essex Rival, Ne Plus Ultra, and Miss Johnson, superb. From Hovey & Co., upwards of fifty blooms, including some splendid specimens of Royal Standard, Splendissima, and Gen. Washington. From J. Breck & Co., fifty blooms, some of them fine. From D. MacIntyre, forty blooms; of the number, Castana and Eva were extra. From S. Sweetser, forty blooms, Mrs. Cox among them, beautiful. From T. Mason, forty blooms. From J. L. L. F. Warren, thirty blooms. From J. A. Kenrick, twenty

blooms. From R. Howe, twenty blooms. Bouquets of flowers from S. Walker, J. Hovey, and W. Kenrick.

Fruits:—From M. P. Wilder, a specimen of the Thompson pear, a variety of much merit, juicy, and highly perfumed with rose. From E. Vose, handsome specimens of winter Warden pears, and Hawthorndean apples. From S. Downer, Snow apples. From L. P. Grosvenor, green Sylvange, Urbaniste, Wilkinson, Passe Colmar, and Dr. Hunt's Connecticut pears, and a variety without name; also, specimens of the Chandler apple, from the original tree. From T. Tufts, Medford, apples without name. From L. Dana, Dedham, apples without name. From J. Fisher, Brookline, Passe Colmar pears. From J. L. L. F. Warren, Isabella grapes.

From Capt. Geo. Lee, Cambridge, beautiful and extra sized Ribstone pippin apples. From Capt. J. DeWolf, Brighton, two varieties of apples called the Seek-no-further and Baldwin, but which the committee did not recognize as such. From J. G. Whiting, Dedham, St. Michael pears, and a large Sugar pear from a seedling tree, together with one variety unknown. From Capt. F. W. Macondry, fine pears without name. From E. Sharp, handsome Wilkinson pears. From G. Bird, Walpole, apples, without name. From Gen. J. Newhall, Lynnfield, seedling apples—good specimens, but not in eating. From J. Harris, Boston, beautiful St. Michael pears. From J. Dunklee, Brighton, blue pearmain apples. From J. Burrell, Quincy, seedling pears, raised by himself; the committee pronounced them beautiful, and fine flavored, and named the variety the Burrell pear.

Dahlia Exhibition.

Saturday, Oct. 10.—At this meeting, a dahlia show for prizes took place. Several of the principal cultivators, desirous of increasing the taste for dahlias, and encouraging their growth, deemed it advisable, from the great perfection of the specimens during the favorable autumn, to hold an exhibition for prizes; the premiums to be made up from the number of contributors to the different classes. The following schedule of prizes was drawn up.

CLASS I.

For the best twelve dissimilar blooms.

For the second best twelve dissimilar blooms.

Entrance, one dollar.

CLASS II.

For the best six dissimilar blooms.

For the second best six dissimilar blooms.

Entrance, fifty cents.

CLASS III.

For the best specimen bloom.

For the second best specimen bloom.

Entrance, twenty-five cents.

The weather continued fine and without frost up to the 17th of the month, and the exhibition at this meeting was one of the finest of the season: the specimens were never seen in a more perfect state; and the lateness of the day gave several growers an opportunity to display some new kinds which had not previously flowered.

There were ten entrances for each class. The chairman of the Flower Committee had appointed judges, who were not competitors, but one of the gentlemen, being unable to be present, the committee appointed Mr. P. Barnes in his place. The judges con-

sisted of Messrs. J. W. Russell, Wm. Leathe, and P. Barnes. They made up their award as follows, which was read to the committee by the chairman, at 2 o'clock.

CLASS I.

For the best twelve dissimilar blooms:—Ne Plus Ultra, Lewesham Rival, Dodd's Mary, Fire Ball, Virgin Queen, Eva, Countess of Torrington, Reliance, Purple Perfection, Marshal Soult, Maresfield Hero, Clark's Julia—to J. Stickney, a premium of \$5.

For the second best twelve dissimilar blooms:—Hope, Unique, Marshal Soult, Splendissima, Gen. Washington, Horticulturalist, Duchess of Richmond, Royal Standard, Marquis of Northampton, Striata formosissima, Mount Pleasant Rival, and Yellow Perfection—to Hovey & Co., a premium of \$3.

CLASS II.

For the best six dissimilar blooms:—Marshal Soult, Unique, Splendissima, Royal Standard, Horticulturalist, and Gen. Washington—to Hovey & Co., a premium of \$4.

For the second best six dissimilar blooms:—Yellow Perfection, Dodd's Mary, Sulphurea elegans, Suffolk Hero, Napoleon, Unique—to P. Barnes, a premium of \$2.

CLASS III.

For the best specimen bloom:—Suffolk Hero—to P. Barnes, a premium of \$2.

For the second best specimen bloom:—Duchess of Richmond—to Josiah Stickney, a premium of \$1.50.

The stands, taken together, were all finer than had ever been exhibited in the Society's room, and the judges must have had a difficult task to make their award; where stands approach so near to all the properties of fine specimens, it requires a nice discrimination to decide to whom the prizes belong. The committee were well acquainted with the qualities of a good flower, and their award has, we believe, given satisfaction to all the exhibitors.

The following are the contributions of dahlias, &c., in addition to the above:—

From J. Stickney, one hundred and twenty-five handsome blooms, many of them very beautiful. From P. Barnes, twenty-five blooms. From H. W. Dutton, twenty-five blooms. From Capt. Macondry, twenty blooms. From J. J. Lowe, seventy-five blooms, some of them fine. From J. Breck & Co., sixty blooms.

From M. P. Wilder, twenty-five blooms; among them, Dane-Croft Rival, a fine scarlet; Primrose, and Eva. From Hovey & Co., seventy-five blooms, some of them superb. From J. Hovey, forty blooms. From S. Walker, one hundred and twenty-five blooms, among them several superb Suffolk Heroes.

Bouquets, from S. Walker, W. Kenrick, and J. Hovey.

Oct. 17.—*Exhibited.* Flowers:—From J. Stickney, one hundred dahlias—among them Ne Plus Ultra (superb,) Essex Rival, Hope, Unique, Virgin Queen, &c. From P. Barnes, twenty-five dahlias. From H. W. Dutton, forty dahlias.

Bouquets, from J. Hovey and W. Kenrick.

Fruits:—From the President, Beurré Diel and Automne Superb pears, the former a fine fruit. From J. P. Cushing, handsome specimens of the St. Michael, Passe Colmar, St. Germain, Duchess of Angouleme, Chaumontel, and one variety of pear unknown, all from

espalier trees. From E. A. Rand, Newburyport, Chaumontel, Lewis's winter Catherine, Messire Jean, and Cross pears, the latter a seedling, originated in Newburyport; they were not in eating—the committee will report on them at a future day. From E. M. Richards, Boxford and Lyscom apples, and Capaheaf and St. Michael pears.

From J. Hooper, Jr., Marblehead, some uncommonly large and fair specimens of the following pears:—Josephine, Beurré Diel, Duchess d'Angouleme, Passe Colmar, and a kind, name unknown, all from trees imported and planted last spring. From Rev. W. Allen, North Andover, apples without name. From M. P. Sawyer, Wilkinson pears. From Dr. Harris, beautiful Dix pears, well ripened from the original tree. From E. Vose, King of Pippin apples, a new and beautiful variety, but not in eating. From Col. Daggett, Andover, common apples without name. From R. Manning, Beurré Bronze, and Beurré von Marum, and Croft Castle pears; the latter one of Mr. Knight's seedlings, trees of which were sent, some years ago, to the Hon. J. Lowell. Mr. Manning thinks it will not be excelled by any of the large pears produced by Mr. Knight. From J. C. Dodge, Attleboro', Isabella grapes, ripened under glass. From Dr. Green, Worcester, sweet russet apples. From J. Hovey, fine quinces.

From Hovey & Co., a specimen of the Baltimore apple, (figured in the *Horticultural Transactions*, Vol. III.,) and undoubtedly true; also, an apple, presumed the Drop d'Or, figured in *Ronald*; both of them were produced on dwarf trees, and were very handsome. From S. Pond, Dix pears, and Isabella grapes. From W. H. Montague, a basket of apples, from a tree planted out by Peregrine White, the first white male born in New England. From I. P. Davis, Tallman sweet apples, from the garden of Mr. Tallman, New Bedford; a fine table and baking fruit.

Oct. 24.—An adjourned meeting from the 3d inst.—the President in the chair.

A committee was appointed, consisting of Messrs. Walker and Stickney, to present to Mr. Dabney, consul at Fayal, from the Society, a variety of seeds and plants, in return for his liberal donation of seeds, sent to the Society last spring.

Messrs. P. G. Seabury, New Bedford, and ——— Bartlett, Boston, were admitted subscription members.

The meeting adjourned two weeks, to Nov. 7, 1840, at 11 o'clock.

Exhibited. Flowers:—From J. Stickney, fifty or sixty handsome dahlias. From H. W. Dutton, a variety of dahlias. From P. Barnes, dahlias; and from F. B. Crowninshield, several dahlias.

Fruit:—From the President, Glout Morceau and Bleeker's Meadow pears, the latter fine specimens; it is a very good variety, but not so remarkable as was originally stated; its high flavor is its principal recommendation. From S. Walker, Burgomaster pears. From E. Croft, Boston, beautiful Duchess d'Angouleme, St. Germain, and Platt's Bergamot pears, all of large size. From B. V. French, Wilkinson, Bleeker's Meadow, Beurré Von Marum, and Phillips pears. From S. Pond, fine Dix pears, and Isabella grapes. From H. J. How, very superior Isabella grapes, all well ripened, bunches full and good size. From Hon. Charles Jackson, Brookline, Passe Colmar pears, and a variety unknown, supposed by some to be the Heathcot.

ART. IV. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes, new:				Squashes, per pound:			
Chenangoes, } per barrel,	1 25	1 50		Autumnal Marrow,	1	—	
} per bushel,	50	75		Winter crookneck,	1	—	
Common, { per barrel, ..	1 00	—		Pumpkins, each,	20	—	
} per bushel, ..	50	—					
Eastports, } per barrel, ..	1 75	2 25					
} per bushel, ..	1 00	—					
Sweet, per bushel,	1 00	—					
Turnips:				<i>Fruits.</i>			
Common, per bushel,	37½	50		Apples, dessert:			
Ruta Baga, per bushel,	37½	50		Common, per bushel,	37½	50	
Onions:				Extra, per bushel,	75	1 00	
New white, per bunch,	4	6		Baldwins, per barrel,	1 50	1 75	
Red, per bunch,	4	5		Russotts, per barrel,	1 50	1 75	
Yellow, per bushel,	62½	75		Greenings, per barrel,	1 50	1 75	
White, per bushel,	75	1 00		Pearmain, per barrel,	2 00	—	
Beets, per bushel,	50	62½		N. Y. Pippins, per barrel, ..	1 75	2 00	
Carrots, per bushel,	50	—		Sweet, per barrel,	1 50	2 00	
Farsnips, per bushel,	75	—		Hub'ston Nonsuch, pr bbl. .	2 50	—	
Shallots, per pound,	20	—		Spice apples, per barrel, ..	1 50	2 00	
Garlic, per pound,	12½	—		Dried apples, per pound, ..	4	5	
Horseradish, per pound	10	12½		Pears, per half peck:			
				Bleeker's Meadow,	50	—	
<i>Cabbages, Salads, &c.</i>				Messire Jean,	50	—	
Cabbages, per dozen:				Common,	37½	50	
Savoy,	50	—		St. Michaels, per doz.	62½	75	
Drumhead,	50	75		St. Germain, per doz.	75	—	
Red Dutch,	75	—		Brown Beurre, per doz.	75	1 00	
Brocoli, each,	12½	25		Platt's Bergamot, per doz. .	1 00	1 50	
Cauliflowers, each,	12½	25		St. Michael Archangel, } per dozen,	50	—	
Celery, per root,	8	12½		Baking, per bushel,	1 50	2 00	
Lettuces, per head,	6	—		Grapes, per pound:			
Tomatoes, per half peck, ...	20	25		Black Hamburg,	50	—	
Cucumbers, (pickled) pr gal.	25	—		White Sweetwater,	33	—	
Peppers, (pickled) per gallon	37½	—		Malaga,	25	—	
				Isabella,	20	25	
<i>Pot and Sweet Herbs.</i>				Berberries, per bushel,	75	1 00	
Parsley, per half peck,	25	—		Quinces, per bushel,	2 00	3 00	
Sage, per pound,	17	20		Pine-apples, each,	—	—	
Marjoram, per bunch,	6	12½		Cranberries, per bushel, ...	1 25	1 50	
Savory, per bunch,	6	12½		Lemons, per dozen,	20	25	
Spearmint, per bunch,	6	—		Oranges, per dozen:			
				Sicily,	25	37½	
				Havana, (sweet),	50	—	
				Chestnuts, per bushel,	2 50	—	
				Walnuts, per bushel,	2 00	—	

REMARKS.—Since the date of our last report, there has been a continuation of fine weather, almost unprecedented at this season, which has been highly favorable to the harvesting of crops of all kinds. The frost held off as late as the 17th, before which period every crop which would sustain any injury was gathered. A few fine rains in the early part of the month forwarded vegetation very rapidly.

Potatoes have continued to arrive in such abundance from the east, that the market is now more than filled; prices have, in consequence, been a little depressed, and the probability is that they will continue

about the same until cold weather; Eastports are fine this season, and lower than heretofore; sweet potatoes exceedingly abundant, and quality very superior. Turnips in quantities, and of handsome appearance and size; ruta bagas are now much more extensively grown than heretofore. Onions have fallen off in prices since our last; a circumstance rather unusual at this season; crops have been highly favorable, and considerable quantities pushed into market earlier than usual. Beets abundant, as are also carrots, the latter being now much more extensively cultivated for stock. Parsnips are now brought in of nearly full size.

Cabbages are well supplied, and the heads are uncommonly well filled out. Brocolis and cauliflowers, of very superior quality, come to hand; the market has seldom been so well filled. Celery is good, though the crop is not fully grown. A few tomatoes yet remain, but the quality is rather inferior. Pickles we include in our quotation, as they are quite an article of trade. Lettuce has come to hand the present week, and of fair sized heads.

In squashes there is but little variation; autumnal marrows, of good quality, are plentiful at our quotations, which are a shade lower than at the date of our last. There is also a good stock of crooknecks. Parsley same as usual. Pumpkins are very cheap.

Apples remain about the same as our last; the market is now better supplied with a good stock, but there is, however, very little, comparatively, doing in this article: Porters are all gone, and, to take their place, may be found a few Hubbardston Nonsuch. Pears are tolerably plentiful, and of some sorts there has been a larger stock than usual; but the supply is not by any means equal to the demand: some very showy specimens of Platt's Bergamot have commanded our highest rates. Peaches all gone. Forced grapes are yet plentiful, particularly black Hamburgs; Isabellas which, a fortnight ago, were a great drug, are now in good demand at our prices: a great fault most cultivators commit is in picking the fruit too soon; a small lot of Malagas has just arrived. Cranberries have advanced a shade: the crop has been very large, but great quantities have been shipped. Chestnuts have been abundant, but are now in better demand. Walnuts very plentiful and good.—*M. T., Oct. 23, 1840.*

HORTICULTURAL MEMORANDA

FOR NOVEMBER.

FRUIT DEPARTMENT.

The season is now getting so late, that but little more can be done in the open garden. After the end of November it will be too late to plant any thing with good success. The opportunity should therefore not be neglected to finish every thing desirable to be done, or that can be done, this month, in order to save time in the spring.

Fruit trees may yet be planted: if in an exposed situation, they should be staked, to prevent their being shaken by the wind.

Strawberry beds, planted any time during the present fall, should be very slightly protected on the approach of cold weather, with a few leaves, or coarse littersy manure.

Raspberry vines should be pruned of all their old wood, and the new wood should be prepared, ready to cover with leaves or soil on the approach of severe weather.

Peach trees, in pots, after the leaves have fallen, and the weather becomes cold, should be removed to the cellar.

Grape vines, in the green-house, or grapery, will be now dropping their leaves. When it is desirable to get rid of them, as soon as possible, this may be effected by the aid of a broom, being careful to brush the leaves *upwards* from the root.

Fruit trees, trained to walls and espaliers, should have the shoots loosened from the wall or trellis.

FLOWER DEPARTMENT.

Dahlias should all be taken up immediately, if not already done. Place the roots in a dry shed, where there is no danger of frost, so that most of the earth may be shaken from the roots, when they may be placed in the cellar, frame, or under the stage of the green-house. See that the labels are put on so as not to get misplaced.

Tulips and hyacinths should be planted this month; the earlier the better.

Tiger and white lilies may now be planted out.

Tuberose, amaryllises, and other tender bulbs, not taken up, should be attended to immediately.

Ixias, sparaxis, &c., not potted, should now be attended to.

Oxalis Bowiei may now be planted for a succession of flowers.

Hardy perennial plants.—All transplanting should be finished this month.

Verbenas should be placed in frames, or in the green-house, on the approach of severe cold.

Azaleas should be sparingly watered during November and December.

Camellias not attended to, as stated in our last, should not be neglected any longer, if possible. The seeds should be looked after, and carefully saved.

Roses, from layers or cuttings, should be repotted, and the plants headed down: cuttings may now be put in, and they will make good plants by spring. Tender roses in the open garden should be covered up, if cold weather ensues.

Chrysanthemums will need liberal supplies of water, while they are flowering.

Ranunculuses should be planted this month. See our directions at p. 416.

Peonies may yet be replanted with success.

Annual seeds, such as rocket larkspurs and others, may be planted this month, if forgotten in October.

Annuals, for flowering in the green-house, should be taken up from the border, where they may have come up from self-sown seeds.

THE MAGAZINE OF HORTICULTURE,

DECEMBER, 1840.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes on Gardens and Nurseries.* By the EDITOR.

DURING the past season, our notes on gardens and nurseries have not appeared so often as heretofore. Owing to circumstances, somewhat beyond our control, it has been impossible for us to visit many of the gardens in the vicinity as frequently as we have done in previous seasons. So few new plants have, however, been introduced within the past year or two, that there have been less objects which have been deserving of any extended notice, and, in consequence, we have viewed the subject as of less importance than when there were hundreds of new plants to be seen, and some description of which would have been read with much interest. In our next volume, we shall recommence our remarks under this head at length, and shall endeavor to embrace in them every thing which we may deem worthy of record in our pages.

But in the place of our notes on gardens in the immediate vicinity of the city, we have, from time to time, given some account of the progress of horticulture in some of the neighboring towns, and we believe that they have been as acceptable as any thing which we could have offered upon those places which have repeatedly been the subjects of our pen. The rapid communication which has within a year or two been effected, by the construction of rail-roads, has brought within a short distance, places which have formerly been looked on as so far removed from us, that any information upon the taste for gardening which might exist, would have been viewed as of

minor importance, compared with what had been accomplished within the sphere of our acquaintance. To bring into notice the many beautiful gardens which are to be found in some of these villages, to render them as familiar to our readers as those with which they are already acquainted, and, above all, to create a feeling of mutual interest between the amateurs and gardeners, which should be of benefit to each, has been our sole object, and we believe, we are safe in asserting that much good has already resulted from what slight information we have spread through our pages. In Worcester, a horticultural society has been established the past autumn; and so easy and rapid is the communication between that town and Boston, that many of the amateurs and gardeners, as will be seen in another page, contributed largely of both flowers and fruits to the exhibition, which was one of great interest. Boston has set the example, and we have no doubt that in the course of a few years, similar societies will spring up in New Bedford, Springfield, Northampton, and other large towns throughout the State. Our intention is, to keep our readers informed of every thing which transpires, of any interest to them, throughout the country; and we shall spare no pains to obtain such information as will convey to all the rapid progress with which horticulture is advancing in every part of the Union.

Garden of Otis Johnson, Esq., Lynn, Sept.—In July of last year we visited Mr. Johnson's garden, and gave a few notes thereon, (Vol. V., p. 293.) Since then, Mr. Johnson has made some alterations which are worthy of notice at this time, although he has not yet fully completed his plan of laying out.

Since our observations, (Vol. V., p. 179, and incidentally at other times,) upon planting flowers in groups, on grass lawns, several gentlemen have attempted something of the kind: among the number we may name Mr. Johnson, whose correct taste has enabled him to do so with very good effect. In front of his grapery, the ground, occupying a space in front of the border, of the length of the grapery, and about twenty feet wide, was dug and levelled, and sodded over, in preference to planting with grass seed, as the object was to produce immediate effect. Previous, however, to sodding down, beds were marked out, which were to be left vacant, for the purpose of planting patches of verbenas. These beds were of arabesque forms, four in number, one at each corner of the ground: in the centre was a large, round bed, six feet in diameter, left to plant out a group of various colored dahlias.

At the period of our visit, the arabesque beds were filled with a variety of the showiest verbenas; one of them with the *Tweediedna* and *chamædrifolia* intermixed; another with the *fulgens* and *Tweediedna*; the other two with the same kinds, and the *Eyreana*, *Binneyana*, and *Teucroides*, intermixed, presenting a beautiful display of the various colors. The beds were prepared with a rich and light soil, and the growth of all the plants was very rapid, and the surface of the beds was one mass of blossoms. In the centre bed, a great variety of dahlias were planted, the tallest in the middle, and the dwarfer ones outside. The appearance of the whole was highly beautiful, and a decided improvement in the aspect of the whole garden. The turf had been recently cut, and now presented an even and deep green surface. The dry weather of June and July would have nearly destroyed all the sodding, had not Mr. Johnson taken the precaution to water liberally.

We have spoken, in our previous notices of Mr. Johnson's garden, of the neat manner in which that part of ground devoted to the flower garden is laid out: it is unnecessary to repeat the same again. Every part displayed the same degree of superior cleanliness which have always characterized Mr. Johnson's grounds; not a weed, a dead stalk, or an unsightly looking object of any sort, was to be seen; and every plant, not naturally of a trailing habit, was tied up to a neat stick. The borders were filled,—not, however, to a crowded state, but so as to allow room to every plant,—with all the choicest annuals and showy flowers. Among those which may be noted down as surpassingly fine, was the *Lötus jacobæus*. We only saw four or five plants in the whole garden, but so strikingly singular and elegant were these, that no person could pass them without being impressed with their beauty. The plants were about eighteen inches high, with large spreading heads, and covered with their almost black flowers, in such profusion that the slender foliage appeared as if studded with jets. The plants were brought forward by planting in a frame or the grapery, and when an inch or two high were transplanted into the border; the seeds do not vegetate freely, unless in a strong heat, and the flowers remain so long expanded, that it is rarely any seeds are perfected. A number of very handsome carnations were intermixed with monthly roses, heliotropes, and other plants. Several plants of *Fuchsia gracilis* were loaded with their pendulous crimson and purple blossoms.

The grapes in the grapery have borne a very heavy crop: they were all cut, however, at the time, and the wood for another year was ripening off. Mr. Johnson manages his grape-

ry himself, but, notwithstanding, he produces as great a crop as is obtained by some of the most experienced gardeners. In regard to the size of the clusters and berries, and the color, the specimens which he has shown, from time to time, have been very superior. The peaches on the trellis, on the back wall, bore a small quantity.

In the back garden, which was added last year, were some excellent crops of vegetables: the fence which separated the two lots was not yet removed, but as soon as the hedge which has been planted has grown up, it will be taken away; many alterations will then take place, which we shall notice at a future time.

Mr. Sweetser's garden, Fulton Village, Woburn, Aug.—We have already informed our readers, that Mr. Sweetser had removed from Cambridgeport to Woburn, where he has commenced operations in gardening on a considerably larger scale than at his former place. The grounds are of considerable extent, upwards of thirteen acres, containing a variety of soil and aspect, and including a pond of water. Our object, at this time, is not to give a particular description of the plan—as we hope to have the pleasure of doing this at another opportunity, somewhat in detail, and accompanied with several engravings—but merely to note what improvements have already been made by Mr. Sweetser.

Fulton Village is about ten miles from Boston, and is within thirty minutes' ride by the Lowell rail-road, which passes through, or rather adjoins, Mr. Sweetser's grounds for many rods. The house is seen to great effect from the rail-road, and when the planting is completed around it, the effect will be much heightened. The house is well designed, and a handsome specimen of villa architecture.

Mr. Sweetser did not remove to Woburn until April, and every thing that has been done in the way of planting has been executed since that period; and when we state that over two thousand trees were set out in the spring, it will be giving Mr. Sweetser considerable credit for his efforts to embellish the grounds. A great number of herbaceous plants were also set out; besides some fruit trees, a variety of strawberries, raspberries, currants, and beds of rhubarb, asparagus, &c., and during the season Mr. Sweetser has produced many melons, egg plants, &c. &c.

The green-house and hot-house, which was erected last autumn, and the plants removed into it at that time, is about sixty-five feet long, divided by a partition, the hot-house occupying about one third of the space. A border was made to

the house, and grape vines planted out in May, several of which had made a tolerably good growth up to August. The hot-house contains a pit for forcing, and the whole range is heated in the usual manner, with a brick flue and hot water.

The plants, under the management of Mr. Pickering, were in very good condition; the camellias were remarkably healthy, and were swelling a profusion of buds, which must afford a splendid bloom the coming winter. Of geraniums we saw a multitude of rooted cuttings, of this year's growth, not yet potted off; several plants of the new fuchsia, (*F. fulgens*), one or two of which were coming into flower. A great variety of the more common green-house plants had been propagated, but had not yet been potted off. Mr. Pickering is a very excellent propagator. We noticed several small plants of camellias, which have been raised from *eyes*, somewhat in the manner we have described for raising grape vines, (Vol. I., p. 40.)—All sorts, both double and single, have been the subjects of experiments, and each have grown equally free, and were now neat plants, a few inches high. In an article, which we propose to offer upon the camellia, as soon as we have leisure to prepare it, we shall more fully notice this method of propagating. The cactuses look finely; but many of the large plants were destroyed last winter, while removing to Woburn.

Mr. Sweetser has a large field for operations; and with his known zeal and industry in getting up a collection, we have no doubt he will soon gather a fine assortment of plants. His collection of camellias, cactuses, and geraniums is already very excellent.

In the garden we found a great number of dahlias planted; but what with the new and almost unprepared soil, and the extreme drought of July, particularly on this light soil, there were but few flowers expanded. [Since the above notes were taken, Mr. Sweetser has had a very fine bloom of dahlias, and at the Annual Dahlia Show of the Massachusetts Horticultural Society, an account of which is given at p. 395, Mr. Sweetser took one of the prizes.] The collection is large, and contains some of the finest sorts. Another year there will be more time to prepare the ground for planting out, and, from its better condition, we doubt not they will bloom very profusely: many herbaceous plants were flowering, notwithstanding they were planted in April.

In the low ground, bordering upon the pond, Mr. Sweetser has been preparing the surface, by burning the peat, and has planted out strawberries to try their cultivation on such a spot. We shall note hereafter how well the plan succeeded.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Exhibitions of Horticultural Societies.*

In again presenting to our readers the reports of the exhibitions of the various horticultural societies, throughout the country, which have taken place, during the present year, we regret that we are not enabled to do it as thoroughly as had been our intention. For three years we have used every persuasion to induce our correspondents to send us accounts of every horticultural exhibition which should be held in the places where they may reside; and although several of our friends, both in seasons past, and also the present one, have attended to our request, and kindly sent us detailed reports, (for which they have our thanks,) yet we are sorry that we have not had some account of the exhibitions of every society in the country placed in our hands. Last year, we believe, the exhibitions of all the active horticultural societies but two were included in our reports: this season we have not yet received any account of the annual exhibition of the New Haven Horticultural Society, or the Albany Horticultural Society, or the Maryland Horticultural Society. The Brooklyn Horticultural Society have not held any exhibition of importance, and, as we have before remarked, there is some fear that the society may be broken up. We have not learned that the Horticultural Society of the Valley of the Hudson held any show the past season, and we presume they did not.

Since last year, however, we are happy to repeat, what we have already stated, that a Horticultural Society has been organized in Worcester, under excellent auspices, the first exhibition of which took place in October; the report will be found annexed. It is conclusive evidence of the interest which is felt in horticulture, to see societies springing up in our large towns. Societies are talked of in other places. In Cleaveland, Ohio, a correspondent informs us, an attempt will be made to get one up the ensuing spring. Such a society would do a vast deal of good in the Western States, and we hope the efforts of those who are concerned, will be crowned with success.

The exhibitions, so far as we may judge from the reports, have been very splendid: the season has been favorable to a profusion of flowers, and many have been brought forward. The dahlia has flowered very freely, and when an abundance of its blooms can be obtained, they make a display of themselves. Verbenas have been great attractions. In fruit, there have been some remarkable specimens exhibited; probably never any that were finer. Of all that were decidedly new we shall speak in the course of our next volume. On the whole, we may congratulate every lover of horticulture upon the rapid progress which the taste for gardening pursuits is making in almost every portion of the country.

Essex County Natural History Society.—Two exhibitions of fruits and flowers have been held at the Society's hall, this season; the first in June, when nature, with the freshness of youth, is arrayed in her richest attire, and the fields and gardens, as yet, present no signs of decay; the other, later in the season, when the appearance of nature

is greatly changed, and the foliage of the trees and forests is assuming those varied tints which add so much to the beauty of the autumnal scenery in New England; at this time, also, the dahlia, with its flowers of every shape and color, and the aster, with its quilled petals, are in perfection, and the fruit, rich and delicious in quality, and almost infinite in variety, is arriving at maturity, thus crowning the labors of the gardener with a plentiful and abundant harvest.

With these few preliminary remarks, we shall proceed to present a detailed account of the above exhibitions. They have been well attended, and the interest in them continues not only unabated, but much increased. The number of contributors has been larger, and the variety of fruits and flowers exhibited more extensive than during any prior season.

Wednesday, June 17, 1840. Plants:—From J. S. Cabot, the following fine herbaceous plants:—roses, Domino, Lady Ailsford, Roi de Prussia, Duc de Choiseul, Watts's Celestial, Lee's Wellington, Rivers's George IV., Léonore, King of Reds, white Globe, Jerusalem, Yorkshire Provins, Fair Maid of Perth, Fanny Pansot, L'Obscurité, Talma Nouveau, La Beauté éblouissant, Cupid, Belle Heloise, Achilles, Charles II., La Tourtarelle, Waterloo real, General Blucher, Harrison's William IV., Belle African;—*Amsônia salicifolia*, *A. latifolia*, *Spiræa filipendula* fl. pl., *S. simplena*, *S. japonica*, *Dicamnus rubra*, *D. alba*, *Podalyria australis*, *Ranunculus acris* fl. pl., *Tradescantia* varieties blue and white, *Oenothera Frazeri*, *Æ. glauca*, *Anthëricum liliastrium*, *Orobis purpureus*, *O. niger*, *Philox suaveolens*, *P. maculatum*, *Lysimachia communis*, *Campánula persicæfolia* fl. pl., var. blue and white, *C. divergens*, *Astrantia minor*, *Delphinium Halmi*, *D. sinensis* fl. pl., *Phyteuma campanuloides*, *Clématis integrifolia*, *Dracocéphalum Ruyachidnum*, *Viscaria alba*, *Lyttrum salicaria*, *Hemerocallis fulva*, *Baptisia australis*, *Verbena mesotria*, *V. elegans*, iris, perennial flax, pæonies, &c., also double pheasant-eyed pinks, and pansies.

From Francis Putnam, a beautiful display of pelargoniums, (geraniums,) including the following varieties: *Speculum Mundi*, Tam O'Shanter, Hill's Champion, Hector, Diomedé, Dennis's Perfection, Lilac Perfection, Sir John Broughton, Eranum, Belladonna, &c. The following fine varieties of roses: Rivers's George IV., Perpetual white Moss, Clifton white Moss, Red Moss, Lee's crimson Perpetual, &c.; also, a variety of pæonies, viz: *Reevesii*, *Pottsi*, &c.; also, *Cereus speciosissimus*, *C. Jenkinsi*, *C. Ackermanni*, *Verbena Tweediana*, *V. Tweediana grandiflora*, *V. Eyreana*, &c. From John C. Lee, double pheasant-eyed pinks; roses, moss, and other varieties; *spiræa*, &c.

From John Lewis Russell, roses, viz: Moss Provence, Garnet stripe, Washington, (?) Cuisse d' Madame, yellow Briar, &c.; *Pæonia Whittleji*, *Lonicera hirsuta*, *L. Frazeri*; Trumpet, Monthly, and other honeysuckles, *Veronica* sp., *Campánula persicæfolia*, *Potentilla atrosanguinea*, *Papaver sibiricum*, *Delphinium sinense* fl. pl., *Spiræa filipendula*, orange lilies, double pheasant-eyed pinks, pansies, &c.

From William P. Richardson, *Campánula medium*, *Lysimachia thyrsifolia*, *Digitalis purpurea*, *D. lutea*, honeysuckles, snap-dragon, larkspur, &c. From John M. Ives, roses, viz., Paris Virgin, Royal Portugal, Fanny Parard, Romena, Roslandier, Ornament du Parade, Boursalt, and Chilven's Provence; double pheasant-eyed pinks, &c. George Driver exhibited a plant (in pot,) of the Norfolk Island pine,

Araucária excelsa, (four years' growth;) the seed was brought from New Holland, or that vicinity, several years since. The branches grow very symmetrically from the stem, and alternate with each succeeding growth; the foliage is a very rich and beautiful evergreen.

Thursday, Sept. 24, 1840.—The exhibition, this day, was very beautiful. The stand of flowers in the centre of the hall presented a gorgeous show of dahlias, with bouquets of other cut flowers, and the tables were laden with delicious fruit.

Plants:—From Joseph S. Cabot, *Verbena mestoria*, *V. superba*, *V. elegans*, *V. Tweediana grandiflora*, *V. Eyreana*, also many new and interesting species of perennial plants, viz: *Anemone vitifolia*, *Verbena chamædryas*, *Pentstemon gentianoides*, *Lobelia ignea*, *L. longiflora*, *Lychnis Bungeana*, &c.

From Stephen C. Phillips, dahlias, viz: *Princess Victoria*, *Mrs. Rushton*, *Marquis of Lothian*, *Napoleon*, *Glory*, &c., also, *Salvia splendens*, *Verbena Eyreana*, *Teucriodes*, and *Tweediana*, *Phlox Drummondii*, *Zinnia coccinea*, *Schizanthus pörrigens*, asters, &c. From John C. Lee, bouquets of zinnias, coreopsis, verbenas, globe amaranthus, marigolds, double feverfew, &c.

From Francis Putnam, a beautiful display of dahlias, consisting of upwards of sixty varieties, viz: *Calliope*, *Countess of Mansfield*, *Glory of Plymouth*, *Marshal Soult*, *Blandina*, *Beauty of Bedford*, *Beauty of Dulwich*, *Bride of Abydos*, *Countess of Torrington*, *Countess of Liverpool*, *Contender*, *Conductor*, *Conqueror of Europe*, *Cedo Nulli*, *Dennisii*, *Brown's Desdemona*, *Duchess of Bedford*, *Glory*, *Gen. Washington*, *Horticulturist*, *Helena*, *Independent*, *Isabella*, *Clark's Julia*, *Lavinia*, *Lord Liverpool*, *Lady Dartmouth*, *Lady Arabella*, *Marquis of Lothian*, *Mrs. Rushton*, *Weller's Mary*, *No Plus Ultra*, *Mrs. Cox*, *Napoleon*, *Princess Victoria*, *Prima Donna*, *Paul's Clio*, *Queen Victoria*, *Queen of Whites*, *Queen of Yellows*, *Rainbow*, *Red Rover*, *Rienzi*, *Rosa Superba*, *Reliance*, *Rose d'Amour*, *Rising Sun*, *Rose Incomparable*, *Striata formosissima*, *Suffolk Hero*, *Sulphurea elegans*, *Scarlet Perfection*, *Springfield Major*, *Salamander*, *Jeffries' Triumphant*, *Ansell's Unique*, *Warminster Rival*, *Stone's Yellow Perfection*, *Zara*, *Beauty of West Riding*, &c.; also, *Verbena Tweediana* and *Tweediana grandiflora*, *Teucriodes*, *fulgens*, *Eyreana*, and *rosea*; *Gladiolus natalensis*, *G. floribundus*, *Cacalia coccinea*, *Amaryllis psittacina grandiflora*, zinnias, asters, &c.

From Miss M. B. Ives, bouquets of asters, marigolds, larkspurs, coxcombs, &c. From Frederick Lamson, bouquets of dahlias, asters, campanula, petunia, &c. From George D. Phippen, dahlias, viz., *Countess of Liverpool*, *Barrett's Susannah*, *Picta formosissima*, *Dennisii*, &c.; *Eschscholtzia crocea*, *Petunia phœnicea*, several new and very beautiful varieties of nasturtiums, verbenas, asters, (native,) zinnias, pansies, &c. From William P. Richardson, *Schizanthus pörrigens*, *Petunia phœnicea*, bee larkspur, balsamines, marigolds, &c.

From Henry Wheatland, dahlias, viz., *Mrs. Rushton*, *Rising Sun*, *Brown's Desdemona*, *Countess of Liverpool*, *Barrett's Susannah*, *Dennisii*, &c.; *Gladiolus natalensis*, *Cacalia coccinea*, Chinese pinks, *Verbena Tweediana*, white Sultan, asters, marigolds, &c.; also, the following native plants—asters and solidago many species, *Chelone glabra*, *Eupatorium verticillatum*, *Helianthus divaricatus*, &c.

Fruit:—From John C. Lee, a fine display, viz., Grapes—black Hamburg, Sweetwater, rose or red Chasselas; Pears—Dix, Duchess d'Angouleme, Beurré d'Aremberg, Buffum, St. Michael, Long green,

Genderim, [?] and three kinds, names unknown; Peaches—two kinds of Clingstone and one of Freestone, names unknown, beautiful specimens.

From John M. Ives, a large variety, viz: Pears—Beurré Bosc, Winter Nelis, Bleeker's Meadow, green Sugar, Bezi Montigny, Easter Beurré, Lewis, Swan's Egg, Early Beurré, Passe Colmar, Echaserie, Long green, Napoleon, Roi de Wurtemberg: Apples—Cloth of Gold, Mela Carle, Hagloe Crab, Spice, Danvers Winter Sweet, Wellington, Swaar, red Doctor, Michael Henry pippin, Hubbardston Nonsuch, Boxford, Stump Catline, Rambo or Romanite; Gages—Roe's yellow and blue Imperatrice; Grapes—Isabella and Catawba; green flesh Melons. From B. P. Chamberlain, Pears—brown Beurré, Broca's Bergamot, and several other varieties names unknown.

From William P. Richardson, Pears—Broca's Bergamot, Royal d'Hiver, Muirfowl's Egg, Iron;—Ribstone pippin apples. From Ephraim Emmerton, a fine collection of pears, &c., many of the specimens very large and beautiful, viz: Pears—Bishop's Thumb, Marie Louise, Henry IV., old French Colmar, Beurré Diel, Seckel remarkably rich specimens, Urbaniste, Golden Beurré of Bilboa, Princess St. Germain, Napoleon, Capsheaf, Broca's Bergamot, Roi de Wurtemberg, Surpasse Virgoulouse, St. Michael, Bonne Louise, winter pear, name unknown; Apples—Drap d'Or; quinces, oranges, Catawba grapes, blue Imperatrice plums.

From William Stearns, a good collection of fruit; Apples—Monstrous pippin, blue Pearmain, Drap d'Or, and two varieties, names unknown; Pears—St. Germain, St. Michael, Summer Thorn, Bishop's Thumb, Long green, Seckel, Brown Beurré, and two varieties unknown. From Robert Manning, a good collection of Pears: many of the varieties have been recently introduced; Pears—Althorp Crasanne, Bezi Chaumontelle, Petre, Beurré Von Marum, Jalousie, Marie Louise, Beurré Bronze, Beurré Duval, King Edward's, Fulton, Hacon's Incomparable, Buffum; Apples—Cambuthnethan, (?) Murphy; Plums—Delicieuse.

From William Ives, Grapes—Isabella; beautiful specimens of St. Michael pears. This pear has been subject to the blight for some years past, in this vicinity, and on this account many of the trees have been grafted with other varieties; all the specimens presented for exhibition, this season, have been remarkably fair, of good flavor, and perfectly free from any blemish. From Mrs. Leverett Saltonstall, a basket containing fine specimens of Seckel pears.

A basket of pears from the old Endicott pear tree, in Danvers, planted by Gov. Endicott, about the year 1630, was presented by one of the family: the pears were of good size, pretty free from blemish, and of good flavor. (For a particular account of the history of this old tree, see Lincoln's *Address* to the Massachusetts Horticultural Society, Sept. 20, 1837, page 30.)

From Mrs. George T. Saunders, a basket of pears, (name unknown,) taken from the same branch, and differing very much both in size and color, some being very large and of a bright yellow, whilst the others were small, and of a dingy russet color, thus presenting a curious anomaly. From Joseph Dalton, a basket of native grapes, large and fine specimens, (under cultivation.) From Moses Pettingell, of Topsfield, large and fine specimens of the Baldwin apple. From F. Buswell, large and fine specimens of the Ribstone pippin and Kilham Hill apples; green flesh melons.

From Joseph S. Cahot, a large collection of pears, containing many choice and excellent varieties, viz: brown Beurré, Seckel, St. Michael's, Autumn Bergamot, Chaumontelle, King of Wurtemberg, Genderim, Cumberland, Marie Louise, Bonne Louise of Jersey, Wilkinson, Henry IV., St. Ghislain, Washington, Princess of Orange, Poiré d'Amour, Jalousie, Napoleon, Bon Chrétien Fondante, Surpasse Virgoulouse, Beurré Capiaumont, Urbaniste, Seedling, Burgo-master, Lewis, Bishop's Thumb, Duchess d'Angouleme, Surpasse Colmar. John M. Ives exhibited a very curious and interesting variety of corn, called "Rice corn."

In addition to the above exhibitions, the hall of the Society was opened on Thursday evening, June 25, 1840, for an exhibition of three of those beautiful and much admired flowers, the Night-blooming Cereus, (*Cereus grandiflora*.) They were from the green-house of Mr. Francis Putnam, who has had also several others open in his house the present season. The crowd of people that thronged to see these flowers was immense, and the admiration they excited was almost beyond conception. It may not be deemed inappropriate to notice in this place, a curious freak of one of these flowers:—it delayed its opening till nine o'clock in the evening, and continued expanded till nine o'clock the next morning; the other flowers were opened by seven, P. M., and began to close by daylight the next morning.—*Y., Salem, Oct. 1840.*

Worcester Horticultural Society.—The first Exhibition of this newly organized Society took place on the 13th, 14th, and 15th of October, at the Town Hall. The room was altogether too small to show off the fruits and flowers to advantage, and the Committee having had a sufficient abundance of good specimens to fill a large room, many of them were necessarily crowded together. The Hall was upwards of fifty feet long, and about twenty wide; a table occupied the centre from one end to the other: the end opposite to the entrance was fitted up with a stage, upon which were placed pot-plants,—the tops of those on the back shelves reaching near to the ceiling. The wall on one side of the hall was covered with a very handsome collection of paintings: between the windows on the other side were placed circular wreaths, and suspended within them were some remarkable specimens of Parker corn. Over the table, chandeliers were suspended from the ceiling, formed by fine ears of the same corn, attached to a circular hoop, or wire, and trimmed with evergreen: when lighted up in the evening, the effect of these chandeliers was highly beautiful.

On one side of the hall, below the paintings, were arranged the dahlias, in stands, amounting to upwards of two thousand blooms, most of them contributed by Mr. Haggerston, who sent five hundred. Hovey & Co., one hundred and twenty-five, M. P. Wilder, one hundred, Joseph Breck, & Co. one hundred, S. Walker two hundred and fifty, J. A. Kenrick one hundred, J. J. Low two hundred, Messrs. Winship and others around Boston. Some very fine blooms were also exhibited, grown in Worcester.

On the other side was an array of huge pumpkins, monstrous beets, rohan potatoes, squashes, ruta bagas, brocoli, &c., &c., all tending to make the show interesting to lovers of superior vegetables, as well as to the amateur of flowers. Many of the finest pears were from the vicinity of Boston: but the apples from Worcester and vicinity were large and very splendid. The arrangement of the hall was the work of the ladies, under the superintendence of Mrs. John

Davis, Mrs. Newton, Mrs. Washburn, and Miss Denny, and we cannot omit to remark that, to the taste displayed in fitting up the hall, was the exhibition greatly indebted for much of its interest. The following is the Report as made by the Recording Secretary.

The first exhibition of fruits and flowers by the Worcester Horticultural Society commenced on yesterday, at the South Town Hall.

The Society was formed by a few individuals who were desirous of aiding with their efforts in the improvement of the cultivation of the gardens and orchards, and who wished to contribute, by such means as were in their power, for the common benefit. The possibility of making a good exhibition was doubted by many: the undertaking was considered as hopeless by some; and was openly opposed by two individuals alone: but it went on without their help, and against their influence.

Our citizens were not aware of the extent of their own resources, nor of the generosity of those friends from abroad who have contributed with a free-heartedness and liberality beyond all expectation, and above all praise, which words can convey.

The exhibition was opened on Tuesday morning, and was as magnificent as any which has ever before been held in New England.

The hall was decorated with some of the paintings gathered from the houses of Worcester. The union of the works of artist skill with the fair fruits and flowers, was a new experiment, and none who have witnessed the exhibition can have failed to realize the agreeable effect of the alliance of nature and art. If more time had been afforded, a collection might have been formed which would have rivalled that which has already excited admiration in the gallery of the Athenæum: compared with the abundance which remains in the homes of our citizens, the exhibition is very small. [A list of these appears in the report, but too long to copy.—*Ed.*]

Among the varieties of apples are the Pound, Converse Greening, Baldwin, Roxbury, Golden Royal, Rhode Island, and English russet, Nonsuch, Pearmain, Golden pippin, Bellflower, Sweeting, Pennock, Spitzenburg, Queening, Hog-pen, Cinnamon, Dwarf, Hamburg, Monstrous pippin, Hawthorndean, Spice, Marygold, Wales, Native, red Cheek, Lady, Log Cabin, Pommewater, Greening, Dudley, low Elder, Hightop, Porter, Detroit, Hapgood, Pumpkin, Codling, Gilliflower, Victoria, Peck's Pleasant, North Branch, Winter Sweeting, Horace, Lyscom, Crow's Egg, and many other varieties.

The pears held a convention: there were the Seckel, St. Michael, Iron, Duchess d'Angouleme, Ambrette, Culotte de Suisse, Wilkinson, Winter Warden, Passe Colmar, Dix, Jalousie, Beurré Bronze, Hacon's Incomparable, Fulton, Marie Louise, Beurré Diel, Napoleon, Lewis Urbaniste, Bergamot, Worcester, Burnett's seedling, Platts, Andrews, Ironsides, Monsieur Jean, St. Germain, Bordeaux, Archangel, Burgomeester, Striped green, Striped St. Germain, Urbaniste, Columbian, Autumn Superb, Meadows, Fondante du Bois, green Sugar, Holland, Buffum, and countless other varieties, which the committees will doubtless describe with reference to excellence of taste, as well as to beauty of appearance.

Some good late peaches were exhibited by A. H. Green, of Worcester. The late period of the season prevented the specimens of these fruits from being numerous.

Of quinces there were the orange, pear, apple, quince, and common.

Semiana plums of rare beauty were sent by Mr. Samuel Pond, of Cambridgeport.

Catawba, Isabella, black Hamburg, Muscat, and white Sweet-water grapes were spread in glorious clusters along the tables.

Figs, grown in the open air, were shown by J. L. L. F. Warren, of Brighton.

The Rohan potatoes, of immense size, and looking as if they were susceptible of no improvement, except that of roasting, were in their immense magnitude.

Squashes were abundant, and some immense in size. There were present the good old Crooked Necked, the Bush Orange, Early Scollap, Acorn, Long Watted, Cornucopia, Cocoonut, and Autumnal Marrow.

The pumpkin of New England did not honor the festival with its presence, and all the owners of these golden tinted fruits, should take shame to themselves that they did not allow the best productions of their fields to grace the festival of the florists and gardeners of Worcester.

Mighty cabbages came to the hall : the ruta bagas attended in their majesty : the beets seemed willing to beat themselves : the Carrots were of prodigious size and brilliant color.

Indian corn appeared in the most beautiful form of arrangement. The golden ears were tastefully braided together in wreaths entwined with laurel, and suspended like chandeliers from the roof, and when illuminated at evening by the lamps, appearing splendidly. Excellent varieties were exhibited : among them were the fruits of Massachusetts, Michigan, and Illinois, with the Sweet, Eight Rowed, Rice, and Parching corn.

Among the most interesting objects of the Exhibition was some honey of delicious flavor, and remarkable transparency and delicacy, contained in two large boxes presented by Henry Snow, Esq., of Shrewsbury. The honey is taken from the hives in boxes, without destroying the bees ; the boxes being placed over the hive, which is perforated, to allow the bees to pass up and deposit their honey. The honey taken in this way is free from all bee bread and young brood. One box contained 34 pounds ; the other, 22. Mr. Snow informs us that from three hives, this year, he has taken eighty pounds of honey, leaving a sufficient quantity to winter the bees. This method does not prevent their swarming as usual.

Among the cut flowers were various kinds of phloxes, yellow and crimson coxcombs, marigolds, roses, beautiful and numerous varieties of the sweet scented verbenas, mignonette, passion flower, violas, petunias, malope, asters, zinnias, snap dragon, sweet sultan, gladiolus, &c., &c. Also, various hardy flowering shrubs, honey suckle, snow drop, Lavatera, strawberry, and smoke tree. Hovey & Co., of Boston, exhibited twenty varieties of verbenas, as follows : *V. fulgens*, *Tweediana* and *T. superba*, *V. incisa*, *Binneyana*, *Eyreana*, *Pépperi*, *Hirstii*, *Colcordii*, *Richardsonii*, *Wales's Seedling*, *Winchesterii*, *speciosa*, *Powellii*, *Russellii*, *ignescens*, *Teucrioides*, *Arraniana*, *chamaedrifoia* and *venosa*.

But the pride and crown of the whole was the dahlia, the "queen of the autumn," in all her endless variety of costume. Some of the different varieties which we noticed of this magnificent flower are these: *No Plus Ultra*, *Hope*, *Marshal Soult*, *Castanda*, *Springfield Major*, *Eva*, (*Foster's*), *Marchioness of Beresford*, *Striata formosiss-*

sima, Ansell's Unique, Keyne's Ovid, Countess of Torrington, Duchess of Richmond, Mary (Dodd's,) *Sulphurea elegans*, Stone's Yellow Perfection, Lady Bathurst, Sunbury hero, Countess of Mansfield, Princess Victoria, Madonna, Beauty of Bedford, Brown's Sarah, *Picta formosissima*, Blandina, &c., &c.

Of those who have encouraged the exhibition of the Society, by their contributions of fruits and flowers, were John Green, Joseph Converse, Thomas Chamberlain, John Davis, Levi Lincoln, Levi Lincoln Jun, John W. Lincoln, William Lincoln, Ephraim Mower, John Flagg, Clarendon Harris, Stephen Salisbury, Alfred D. Foster, Isaac Davis, Robert S. Gleason, Lewis Chapin, Frederick W. Paine, George Newton, E. H. Earle, S. H. Colton & Co., A. H. Green, Wm. N. Green, E. F. Dixie, Benjamin F. Heywood, Asa Johnson, S. A. Howland, Rejoice Newton, S. M. Burnside, C. W. Hartwell, Oliver Blood, Abel Jaques, J. M. Earle, David Messenger, Samuel B. Woodward, Elijah Bigelow, D. Foster, Mrs. F. Allen, of Worcester. Silas Flagg, George Flagg, Tilla Chaffin, of Holden: Doct. Burnett, of Southborough: C. P. Hitchcock of Uxbridge: Leonard Harrington, Henry Snow, Silas Allen, Philo Slocumb, Josiah Maynard, of Shrewsbury: Charles White, of Northbridge: Daniel Tenney, of Sutton: Harvey Bancroft, of Auburn: John Clapp, Isaac Southgate, Hiram Knight, Leicester: Moody Morse, Spencer; C. W. Forbush, Jonathan Wheeler, Eben Aldrich, Jonathan W. Stowe, Salmon Hathaway, Samuel Knox, Grafton.

Among the contributors from abroad were Mrs. Timothy Bigelow of Medford, John A. Kenrick of Newton, Marshall P. Wilder, E. Bartlett, and Elijah Vose, Dorchester; Samuel Pond of Cambridgeport, Robert Manning of Salem, J. P. Cushing of Watertown, James L. L. F. Warren of Brighton, D. Haggerston of Watertown, Joseph Breck of Boston, Samuel Walker, Roxbury, Messrs. Hovey & Co, Boston, William Pratt of Watertown, Messrs. Winship, Brighton, J. A. Rockwell, Norwich. (*Worcester Ægis*.)

Columbian Horticultural Society, Washington, D. C.—This Society held its Fall Exhibition on Friday October 30th. The following is the report, by Geo. Watterston, Esq. Chairman of the Committee of Arrangements.

The Committee had to encounter some difficulties in preparing for the exhibition of the 30th ult., in compliance with the resolution of the Society. The lateness of the season and its previous unfavorableness were not among the least of these difficulties; but they are happy to say that they were surmounted by the untiring zeal, industry, and activity of the members, and especially of one to whom the Committee and the public are chiefly indebted for the very creditable fall exhibition which has just been witnessed. Mr. Buist, one of its most efficient and useful members, and among the most successful florists of this District, spared no pains or exertions to execute the wish of the Society, by getting up, with little previous notice, and without much aid from others, another fall exhibition that would not be discreditable to its members. To this skilful florist's activity, liberality, and taste, therefore, the Society owes the success which attended its late autumnal show; and the Committee take great pleasure in awarding to him the praise to which his merits and services so justly entitle him. Most of the floral contributions were from this gentleman's garden, but several valuable and beautiful contributions were from the collection of amateurs, well-wishers, and other mem-

bers of the Society, who cheerfully lent their aid to render the exhibition as attractive as possible.

On this, as on all former occasions, the arrangement of the flowers were made more pleasing by the taste of that sex in which a feeling of the beautiful seems to be innate. The Committee are happy to state that they owe much to the taste and industry of Mrs. Seaton and Mrs. Suter, old and constant friends of the Society, and the Misses Meade, Price, and Smith, who have, on several previous occasions, rendered important services to the Society, and who have grown up almost amidst these displays of floral beauty. This is nearly the seventh year of the existence of the Society, and yet the exertions of these and other ladies have never flagged, nor has their ardor abated. They have never suffered a feeling of apathy to seize them, and knowing that the objects of the association were of the most useful and laudable character, and that its effects had been sensibly experienced in the wonderful improvement of the various branches of gardening in this city and its neighborhood, they have lent their assistance with cheerfulness, and persevered with a steadiness of purpose that entitles them to the thanks and gratitude of the Society.

The decorations of the room in which the exhibition was held were neat and in good taste. The apartment—the chamber of the Board of Aldermen—would have been entirely too small for the usual annual exhibition; and on this occasion it was found somewhat too contracted for the crowd that attended. Mr. Varden, the proprietor of the Museum, with that public spirit which distinguishes him, generously offered the use of Masonic Hall to the committee, but, having made their arrangements, they were obliged to decline it. This gentleman is entitled to the thanks of the Society. The decorations consisted of pyramids composed of the numerous varieties of the dahlia, tea, and noisette roses, verbenas, &c. beautifully arranged. The two larger ones were prepared by Mr. Buist, one of which was surmounted by an eagle in the attitude of flying, formed of dahlias, &c.; and from the other, which stood to the right of the President's chair, was suspended a pair of scales formed of moss, properly balanced, and indicative of the principles of the Society, to render equal justice. The pyramid on the left of the chair was composed of dahlias, tea roses, &c. and surmounted by a beautiful wreath of variously colored flowers. This was a contribution from the garden of the Hon. H. S. Fox, British Minister, whose leisure is devoted to the cultivation of the natural sciences, and especially botany, the most beautiful of them. It was prepared by his gardener, Benjamin Allen, and did him great credit. A small pyramid,* from the collection of Mrs. Nichols, of Georgetown, was much admired, as were also the floral contributions, in china vases, &c. arranged upon the stands, from Mrs. W. A. Bradley, Mrs. Suter, Mrs. Dick, of Georgetown, Mrs. Seaton, Mrs. G. Gilliss, the Misses Meade, Crawford, Barnard, Townson, and Kuhn, and Rosa Forsyth, consisting of dahlias, zinnias, tea and other roses, verbenas, China asters, petunias, native asters, balsams, marigolds, &c.

But the collection of dahlias arranged in cases, forming a semicircle within the bar, from the garden of Mr. Buist, was exceedingly

* This pyramid was composed of dahlias, tea and daily roses, the Basilica tuberose, coxcomb, verbenas, larkspur, and chrysanthemum petunias, zinnias, salvias, phloxes, India pinks, geraniums, marigolds, and balsams.

splendid, and attracted the attention and admiration of every visiter. It consisted of a numerous variety of the most beautiful dahlias, a list of which the committee regret they have not the means of furnishing.

A fine collection of beautiful dahlias, from the garden of Mr. Thomas Blagden, sent by his gardener, Mr. John Pearce,* consisting of near thirty varieties, was also greatly admired, and a simple vase of native flowers threw out their unobtrusive beauties from a table where it stood, as if shrinking from a contrast with the more gaudy and splendid favorites of Flora around it. It was the contribution of Adam Lindsay, the venerable father of the Society, to whose winter of life the pleasing and tranquillizing pursuits of horticulture still lend a charm; and though in the "sere and yellow leaf," he feels, with the amiable Howitt, that flowers "become invested, by a multitude of associations, with innumerable spells of power over the heart, and are to us memorials of the joys, sorrows, hopes, and triumphs of our forefathers, and to all nations the emblems of youth in its loveliness and purity." Dr. J. S. Gunnell contributed a large collection of choice and beautiful roses, and among others a fine specimen of the carnation rose; and two youths, apprentices of Mr. Buist, formed for the occasion a neat little pyramid of dahlias, which decorated one of the tables.

The season was somewhat too far advanced for a great display of fruits, and the specimens of vegetables for exhibition were generally inferior to those exhibited on former occasions. The fruits consisted almost exclusively of apples and grapes, with a few specimens of the Seckel pear and Heath peach, and some oranges and lemons. The grapes, Catawba and Isabella, of Mr. Shoemaker, Mr. Lindsay, Mrs. W. A. Bradley, Mrs. Towson, and Mrs. Seaton, were mature and perfect, and made a fine display. Col. Henry Naylor's cantaloupes, called the Bonaparte; Mr. J. A. Smith's and Col. Naylor's apples, of numerous varieties; Mrs. Seaton's Seckel pears and filberts, and Mrs. Suter's Heath peaches, were much admired. The grapes were more numerous, and decidedly superior to any heretofore exhibited, and looked exceedingly tempting. The vegetables on the tables, sent from the gardens of Messrs. J. A. Smith, Lindsay, Blagden, H. Naylor, Wiltberger, Turnbull, Mrs. Nicholls and Miss Meade, did great credit to their respective cultivators, especially the beets and vegetable marrow of Mr. Blagden, the vegetable marrow of Miss Meade, the Rohan potatoes of Mr. Lindsay, and the turnips, okras, squashes, onions, beans, parsnips, and carrots of Messrs. J. A. Smith and H. Naylor.

Among the decorations of the room were fine specimens of the *Basifolia tuberosa*, *Ipomœa Quamœlit*, &c. in pots, sent by Mr. Buist, with several rare and valuable exotics from his conservatory, which diffused their fragrance through the apartment, and added to the interest and beauty of the spectacle. Among the rarest of these exotics was the pitcher plant, *Nepenthes distillatoria*, one of the wonders of the vegetable creation, and said to be exceedingly difficult of culture in green-houses. It is a native of Asia. The flowers are diœcious, the stem cylindrical, the leaves alternate, and sheathing at base. They are strongly nerved, and the middle nerve

* Mr. Pearce is a very successful cultivator, and has done much for the improvement of horticulture in our city. It was this gentleman, and not Joshua Peirce, who contributed the articles mentioned in the *Intelligencer* of Monday.

extends beyond the leaf like a tendril, and terminates in a kind of urn or pitcher. This pitcher, when matured, is from three to four inches in length, and about one in width, and the top is covered with an obicular lid, which opens and closes at certain periods. It usually contains from a gill to three glasses of sweet and limpid water, and when full its lid closes. In the day the lid opens, when much of the water is evaporated; but during the night, this loss is again supplied, and in the morning it is found full, and the lid closed. This curious plant was much admired by all who attended the exhibition. The committee cannot omit to mention, that some of the beautiful productions of Flora exhibited on this occasion were most successfully imitated by a lady of this city, Mrs. Bowman. It was difficult, without a close inspection, to distinguish the work of art from that of nature, so skilfully had the fair artist imitated in worsted the various flowers she had wrought as an ornament to mats for vases, &c.

The exhibition continued from ten o'clock, A. M. to nine o'clock, P. M., and the visitors of both sexes, during the whole time it continued, were numerous from all parts of the District, and manifested no little satisfaction at this comparatively small, but highly gratifying exhibition of the Society. The committee were pleased to find that, notwithstanding the difficulties to which they have referred, the absence of some of the usual contributors, the lateness of the season, and other causes not necessary to mention, this second fall exhibition was attended with a success, and afforded a degree of satisfaction, which they had scarcely expected to see realized. When it is considered what amount of good has already been conferred on this District by the establishment of the Society, the taste for flowers which it has diffused, and the great improvement it has effected in the various branches of horticulture within the sphere of its influence, and the benefit it has conferred on *practical gardeners*, it cannot but be an object of the deepest interest to every public-spirited man, and every lover of science, to see such an association advancing in usefulness and prosperity; and no exertion should be spared, and no means withheld, to contribute to its perpetuity, and its more enlarged and permanent sources of utility. Most of those who have united themselves in this laudable enterprise, have done so from the most disinterested and philanthropic motives. They have had nothing to gain but the gratification resulting from the consciousness of conferring a blessing on, and rendering themselves useful to, their fellow men—a duty which every valuable member of society must feel a pleasure in performing. And though the committee are aware that scarcely any society in this city has continued more than a few years in existence, they feel assured that this is one which will form an exception to the general fate of such voluntary associations, and which, from its manifest usefulness and beneficial tendencies, promises to be permanent in its duration, diffusing pleasure and conferring blessings on the whole community within the wide range of its operation. The *gratuitous* exhibitions of this and the last autumn, have, the committee believe, been justly appreciated by the public, and they cannot but indulge the hope that, for the purpose of exciting emulation and stimulating and rewarding the exertions of the members of the Society and other horticulturists in this District, by granting suitable premiums, and thus producing a greater amount of good to the community, by leading to higher improvements in cultivation, and the introduction of new and valuable varieties of fruits, vegetables, and flowers, the public will not be backward in lending their pecuni-

ary aid at such future annual exhibitions as the Society shall deem it expedient to hold.—(*Nat. Int.*)

Middlesex Horticultural Society, Lowell.—This Society held one exhibition on Wednesday, June 17, at which time a very fine display of roses, and other flowers of season, was made.

Exhibition, June 17th, 1840.—Flowers. Plants in pots:—Geraniums, three varieties, *Hydrängen*, *Gilia tricolor*, and pinks, by Dr. Parker, of Billerica. From Amos Carlton, Chelmsford, double feverfew. From Albert H. Locke, Esq., a very large oleander, in full flower, and *Agapánthus umbellatus*. From Mrs. E. Taft, *Agapánthus umbellatus*. From N. Wright, Jr., eight varieties geraniums. From P. P. Spalding, *Passiflora cærulea*.

Cut Flowers:—Bouquets from Mrs. J. Aikin, Mrs. J. H. Blake, Mrs. G. Brownell, Mrs. Francis, Mrs. M. Shattuck, E. J. Payne, W. A. Vanderlip, William Bennett, J. Green, D. Parker, N. Wright, Jr., E. B. Hanscomb, J. W. Millar, Wm. H. Bradley. Twenty varieties roses, from Dr. J. O. Green. Twenty-four varieties roses, from N. Wright, Jr. Beautiful rocket larkspurs, from Hovey & Co., Boston. Fine roses, from A. H. Hovey, Cambridgeport, and S. S. Lawrence, Tyngsboro'. Two seedling laced pinks, from E. J. Payne. Pansies, by N. Wright, Jr. *Zephyranthes carinata*, *Plúx Drummondii*, and clematis, by J. B. Francis.

Native flowers, by A. O. Ordway, N. Wright, Jr., C. E. Brazier, C. A. Aiken.

Fruit:—Strawberries, (Methven Castle,) very fine and large, measuring from three and a half to four and a half inches in circumference, from Alexander Wright, Esq. Strawberries from Rufus Whittier, and Mrs. J. H. Blake. Gooseberries, by William Spencer. Cherries, from H. W. Priest, and Robert Bradford, not raised in this vicinity.

Vegetables.—Rhubarb, by P. P. Spalding, and D. P. Coburn, of Tyngsboro'.

The second exhibition of the season was held on Wednesday, September 16, the report of which is as follows:—

Of the great crowd which thronged Mechanics Hall, Wednesday afternoon, to witness the exhibition of fruits and flowers, by the Middlesex Horticultural Society, we have not met with a single individual whose expectations were not more than equalled by the rich display, on that occasion, of many of the most choice and delicious, as well as most beautiful productions of this highly propitious season. Among the apples and grapes, there were some, which, in our opinion, surpassed the finest that were produced at the horticultural exhibition in Boston, which we visited last week.

Flowers:—A great variety of green-house plants from Nos. 2 and 3, Boott Mills, among which we noticed *Vinca rosea*, purple and white, *Mimosa sensitiva*, in full flower. *Calla æthiopica*, from J. Avery. *Ornithogalum pyrenæicum*, from P. P. Spalding. *Fuchsia globosa*, *Canna indica*, heliotrope, and a very large seedling geranium, from N. Wright, Jr. *Vinca rosea*, two varieties *Fuchsia globosa*, and a very beautiful — in full flower, by James Wilson. *Salvia splendens*, *Maurandya Barclayana*, *Calceolaria rugosa*, *Schizanthus Priestii*, from Dr. D. Parker. *Salvia splendens*, from P. W. Warren. Petunia and geranium, from G. H. Carleton. Fig tree, from Miss H. Reed. Purple petunia, from Mrs. T. S. Farnsworth. Globe amaranthus and Jerusalem cherry, from J. Sweetser. Several fine plants are omitted in the report, for want of names. Bouquets

from Mrs. S. Lawrence, S. Chellis, B. Green, Mrs. R. Reed, A. Batchelder, W. A. Vanderlip, Mrs. S. Adams, B. F. Cutter, Mrs. M. Shattuck, C. E. Brazer, Miss E. Brownell, O. W. Bailey, R. Whittier, Mrs. J. Aiken, I. N. Metcalf, A. H. Hovey, Mrs. C. C. Nichols, — McAuley, and T. Clark. Choice varieties of zinnias, German asters, verbenas, &c. from R. Whittier, N. Wright, Jr., D. Parker, W. A. Vanderlip, and J. B. Francis. Twelve fine named varieties verbenas, from Hovey & Co., Boston. A very large and beautiful show of dahlias, from D. Parker, L. Williams, Esq., and Hovey & Co. Dahlias, also, by D. Dana, Esq., Miss Brownell, J. B. Francis, N. Wright, Jr., E. Beals, T. Clark, Abiel Rolfe, and A. H. Hovey, Cambridgeport.

Fruit:—Apples, many very large and fine, by P. P. Spalding, and Amos Carlton, of Chelmsford, Simeon M. Marshall, Jonas Varnum, Pascal P. Coburn, and J. W. Wright, of Dracut, Messrs. Parker, of Billerica, A. Holden, of Lowell, and B. F. Cutter, of Pelham. Crab apples, by Mrs. A. French, of Lowell. Pears, by N. Spalding, and A. Carlton, of Chelmsford, E. Phinney, of Lexington, and P. P. Coburn, of Dracut. Peaches, by J. H. B. Ayer, of Lowell, E. Phinney, of Lexington, P. P. Coburn, of Dracut. Grapes in great variety, by S. M. Marshall, of Dracut, E. J. Payne, N. Wright, J. D. Prince, of Lowell, A. Carlton, of Chelmsford, D. P. Coburn, of Tyngsboro', and E. Phinney, of Lexington. Plums, by N. Wright, of Lowell. Melons, of various kinds, by E. Phinney, of Lexington, C. Abbott, of Chelmsford, Messrs. Parker, of Billerica, I. N. Metcalf, of Lowell, D. P. Coburn, of Tyngsboro', and P. P. Coburn, of Dracut.

Vegetables:—Fine specimens of tomatoes and white carrots, also Canada corn, eleven and twelve ears from one seed, by B. F. Cutter, of Pelham. Tomatoes, by W. P. Brazer. Very large squashes, weighing from fifty to one hundred pounds, by L. G. Long, of Tewksbury, P. P. Coburn, Dracut, Samuel Garland, Amos Carlton, and the largest by J. B. V. Coburn, of Dracut. Several fine squashes, by E. B. Pasch, among which was one very curious looking, called the green Ox Bow. Two beautiful specimens of the fruit of the egg plant, by Mr. McAnulty, of Lowell. One bushel Rohan potatoes, a fine specimen, also some of the "brown corn," a variety very large and early, a valuable kind to be introduced among our New England farmers, by J. B. V. Coburn, Dracut. "Parker corn," a very productive variety, by J. P. Cutter, Dracut. Virginia corn, very large, and nearly ripe, also a large sugarloaf cabbage, by C. C. Nichols. A good specimen of Tuscarora corn, by G. Parker, Billerica. Potatoes, second year from seed, very fine; also, one peck Irish apple potatoes, raised from two eyes, very large and fair. A singular lot of tomatoes, and a few fine peppers, from North Bend, by Samuel Lawrence, Esq. Stalks, bearing very fine large peppers, by B. F. Cutler, Pelham. Monstrous sugar beets, by several persons.—(*Journal.*)

Horticultural Exhibition in Rochester, N. Y.—The Genesee Agricultural Society held its annual show at Rochester on Saturday, the 7th of October. In connection with the other departments of the society, there was a very handsome display of flowers, fruits and vegetables. The following is the report of the committee on horticulture:—

Considering the little effort that had been bestowed upon this department by the society, and the lateness of the season, the display of horticultural productions was very good: indeed it was much better than might have been expected under the circumstances.

Flowers:—The display was very good, considering the lateness of the season. Indeed, were it not for the remarkably mild weather with which a kind Providence has favored us, these most beautiful of His works would not have ornamented our exhibition.

The most beautiful object of the exhibition was a pyramid of double dahlias, about three feet high, arranged so as to display almost every variety of colors in a beautiful combination. They were from the garden of Alex. Kelsey, Esq., by whose taste they were so beautifully arranged; premium \$5. The best dozen dahlias, to Messrs. Ellwanger & Barry, florists, \$2.

Best two bouquets of cut flowers, to Messrs. Ellwanger & Barry, \$2. A fine lot of cut flowers were presented by Miss Catharine Brooks, and also by Mr. A. Stone.—The Hall was also ornamented by a beautiful collection of green-house plants, from Messrs. Ellwanger & Barry, and from Wm. King, florist.

Fruit:—The display consisted, mostly of apples and quinces. These were very plenty, and of great beauty and excellence. The premium for the best dozen apples, was awarded to Josiah Howell, of Chili, for a dish of twenty-ounce apples, weighing over one pound each, well ripened, and of good flavor, \$1.

A large assortment of splendid apples were exhibited from the orchard of Wm. Pitkin, E. M. Parsons, Alex. Kelsey, Chs. Filer, N. Hayward, M. Garret, and others. For the best dozen peaches, to H. M. Ward, for very large orange clingstones, well kept, \$1. Mr. N. Hayward exhibited fine malacatons. For the best dozen quinces, to J. W. Seward, \$1. The display of quinces was very fine. They were offered by Titus Goodman, N. Draper, Zera Burr, E. Moore, J. H. Robinson, Alex. Kelsey, Mrs. Mathies, and several others.

Vegetables:—Some fine specimens were exhibited; but the competitors for the premiums were not as numerous as could have been wished. The committee awarded as follows:—‘For the best two heads of cabbage, to B. Klaim, for very large and fine heads of the drumhead variety, \$2. Best three watermelons, to H. N. Langworthy; very superior, no competition, discretionary premium, \$2. Best three pumpkins, to Augustus Frederick; very handsome inammoth variety, weighing nearly one hundred pounds, each, \$2.

A number of very large squashes were exhibited, but not for competition. Best six beets, to J. Adams; long blood variety, \$1. Several lots of enormously large mangel wurtzels and sugar beets were exhibited; also some of the new early turnip rooted variety, called *Bassano beet*, from the garden of Wm. R. Smith, of Macedon. Best six parsnips, to Theodore Backus, \$1. Best turnips, to William Webb; several kinds, very fine, \$1. Best onions, to William Hamilton; very large and fine shaped, \$1. Best celery, to Richard Cooper; no competition, but very fine; discretionary premium, \$1.

Among the vegetable curiosities, were some seven year pumpkins, exhibited by M. B. Bateham, some of which were raised in 1837, and some in 1838. They appeared as fresh as though just taken from the vines, and bid fair to complete the seven years. They are kept in the seed store.—(*New Genesee Farmer*.)

[Our correspondent, Mr. Bateham, has been active in getting up the horticultural display, and we are happy to learn that his efforts seconded by others have been so successful: another year we shall look for a more glowing description of the Annual Show.—*Ed.*]

Pennsylvania Horticultural Society.—We have, from time to time, presented reports of the exhibitions of this society. The last which appeared was that of July; the report of the August meeting was not received. We now annex an account of the annual exhibition which was held in September last, as copied from the printed report of the society.

Philadelphia, Sept. 7th, 1840.—The anniversary meeting of the Society was held at the hall, on this evening. Joseph Price was called to the chair, and W. S. Vaux appointed secretary. Dr. G. Watson declined being a candidate for reelection to the office of recording secretary. The committee on nomination reported, and the Society proceeded to the choice of officers for the year 1841. The following gentlemen were elected:—

President.—Horace Binney.

Vice Presidents.—Charles Chauncey, George Pepper, Joseph Price, and Robert Carr.

Treasurer.—John Thomas.

Corresponding Secretary.—J. B. Smith.

Recording Secretary.—Thomas P. James.

The Twelfth Annual Exhibition of the Society was held in the Masonic Hall, on the 16th, 17th and 18th of September. The committee preface their report with the following remarks:—

The twelfth exhibition of the Pennsylvania Horticultural Society was held in the Masonic Hall on the 16th, 17th and 18th of September, 1840; and presented a great attraction to the amateurs and admirers of horticulture. The apartments of this building, though no one of them affords the same magnificent *coup d'œil* which was presented at the last autumnal exhibition in the hall of the Philadelphia Museum, yet, by their number and position, gave the means of a more convenient and select arrangement, at the cost of diminished labor and expense. The plants and flowers, the table fruits of the season, and the vegetables, and field products, had each their respective apartments; the first two of them immediately contiguous, and the third accessible by easy approach in the neighborhood, so that each class of objects could be separately inspected, and its full value appreciated. The whole bore the closest examination, and gave fresh proof of increasing science, taste, and interest in this department.

The large saloon of the hall was filled with plants, flowers, and floral decorations. In copiousness and in scientific characters, the plants were, in some particulars, superior to those of former exhibitions, and in all bore a fair comparison with the best of them. The details presented in the statements and reports, which follow, show that this is not merely general praise, but is sustained by particular proofs.

Upon entering the saloon, the eye was at once arrested by the centre table, an oval structure of ten by sixteen feet, rising by four gradations to a proportionate height, and containing about two hundred specimens of succulent plants, nearly the whole of which were of the order *Cactaceæ*; some of them very rare, and all of them in excellent condition. Among them, and worthy of particular notice, was a specimen of the *Melocactus saccharinus*, supposed to be fifty years old, and measured twenty-six inches in diameter, placed at one end of the table, and, at the opposite, another specimen of the same plant, of rather smaller dimensions. In the collection were a dozen of *Cereus senilis*, presenting the grave aspect of hoary headed senators

presiding over the fantastic assembly which was arrayed around them; others of this genus, the *C. azureus*, *chlorocarpus*, *Victoria*, and of some species not yet ascertained, excited high interest. Of *Echinocactus* there were forty specimens of *lastispinus* surrounding the whole table on the first or lowermost grade, the bristling guard, as it were, of the whole body: and of the same genus possessing interest, were the *E. candicans*, *Karwinskii*, and twelve new species from South America. Of the *Mammillaria* genus the most striking were the *tortulensis*, *monstrosa*, *longimamma*, and eighteen new species from South America and Mexico; and of the *Opuntia*, there were an interesting variety of new species from the same quarters. Many of the rarer species were grafted upon stalks of the more common, thus presenting a variety of fanciful forms.

This unique collection was contributed to the exhibition by Mr. John B. Smith, and might have been shown without apprehension to an European collector, or to a body of critical and scientific gardeners in any part of the world.

At the east and west of the centre table were two small circular tables, bearing on their centre a beautiful specimen of *Latania borbonica* and *Zamia pungens*, surrounded by Cacti, Euphorbiæ, Stapeliæ, etc. from various collections, interspersed with numerous bouquets.

Between the central table and that at the eastern end, was a high floral structure, to which the first premium offered for designs of this description was awarded. It was a composition of various parts, the foundation of which was a pedestal, supporting a globe, above which were projecting arms, suspending imitations of gardening implements, a spade, a rake, an edging tool, and a scupper hoe; and still higher were the scales of Justice in equipoise, with an eye looking down upon them, and an eagle at the top, expanding his wings over the whole. It might be unjust without the aid of the inventor to interpret this allegorical figure; but if it meant to show that horticulture is worthy of attention all over the world, that, in the United States especially it does and will receive public patronage and protection, and that the true way to promote it is to keep a single and steady eye upon the important administration of horticultural societies, so that their praises and rewards shall be distributed to those alone who deserve them, without fear, favor or personal distinction; it told an unquestionable truth which this society has always felt and will doubtless continue to observe.

Still further in an eastern direction was a beautiful rustic flower stand, bearing a tastefully arranged bouquet of cut flowers of a pyramidal form. On the west side of the saloon was placed the model of a church encased with flowers, and near it a skeleton model of a temple, variously decorated with flowers, etc. And immediately to the left of the entrance to the banqueting room, in which the fruits were displayed, was the model of a locomotive, of exact proportions and appropriate arrangement; which in the estimation of the Committee merited the second premium offered for a fancy design in flowers—it was deservedly admired. While this praise is indispensably due both for the zeal and taste manifested in this, and in the floral design first mentioned; it ought not perhaps to be forgotten, that flowers are never more appropriately used in the embellishment of exhibitions of horticulture, than in forms that are free, airy and graceful like themselves,—in wreaths, festoons and bouquets; which are untrammelled by the hard outline of implements of husbandry or of machines, to which in imitative floral structure they are bent or broken to conform.

It is hoped, that in succeeding exhibitions, while structures such as those now referred to will be presented, others of a free and more fanciful character will not be unrepresented.

The saloon on all its sides exhibited tables which displayed choice green-house plants, orange, lemon, citron, pomegranate trees in full fruit,—a fingered lemon tree of China in bearing, palms, cotton, the coffee tree, tea, sugar cane, pimento, pepper, ginger, cinnamon, arrow root, sago, squill, camphor, gamboge, mastiche, quassia,—indeed, specimens of almost every plant yielding commercial or medicinal products.

Through the centre of the banqueting room, and running nearly its whole length, was a table of three elevations, upon which were displayed most beautiful specimens of choice fruit, though in a season rather remarkable than otherwise for the general scarcity of it. A seedling peach of great beauty was much admired and sought after for seed. Pears, some of them of truly mammoth size. Grapes in great variety. Apples, quinces, even strawberries, gratified the eye and tempted the palate. But that which attracted the attention of all visitors was a display of one hundred varieties of fruits from A. J. Downing & Co., of Newburgh, New York, consisting of thirty-six specimens of pears; fifty-one of apples; ten of plums; and three of grapes. This affluent contribution from a sister State did not lose a single commendation, because it did not come from the gardens of Pennsylvania.

The highest elevation of the table was covered with honey, in glass hives; preserved fruits in glass jars; grapes in pots; and a pyramid of flowers, to which the third premium was awarded; dahlias and cut flowers in tastefully arranged bouquets. Fruits and flowers were on all sides in the most attractive union, each embellishing the other.

Of the vegetables in the third apartment it may be remarked that in size and quality they generally surpassed any specimens shewn at former exhibitions, and that their variety was greater. It is in this department of horticulture that the art comes into contact with domestic life in general, and contributes to the comfort of even the humblest table, by its influence upon the quantity, quality, and cheapness of a necessary of life.

Plants exhibited:—From John B. Smith, upwards of two hundred specimens of plants, including more than seventy-five species and varieties of the Cactaceæ and of some of them from ten to forty plants each. From Carr, McAvoy & Gale, sixty plants, mostly hot-house specimens. From Gen. Robt. Patterson, upwards of one hundred fine plants. From P. Mackenzie, one hundred and twenty plants, including some new things, among which we notice *Salvia patens*, and *Passiflora Loudoni*. From Robert Buist nearly one hundred species of various plants, among them *Euphorbia Bryoni*, *Gladiolus ramdeus*, *Phlox omniflora*, and *Tweedia cærulea*. From Bernard Duke, fifty plants. From Peter Raabe, twenty-five plants. From Robt. Kilvington, upwards of fifty plants, a portion of them indigenous species. From Mrs. Hibbert fifty plants. From J. Sherwood, seventy-five plants. From Richie & Dick, twenty-five plants. From A. Dryburgh, twenty plants. From Alex. Parker, nearly one hundred and fifty plants of a great variety of kinds.

Cut Flowers in Stands. Dahlias:—By Henry A. Dreer; Thomas Hancock, Burlington; Robert Buist; Thomas Heiskell, Bristol; G. C. Thorburn, N. York; Peter Mackenzie; Gen. R. Patterson; Joshua Longstreth; Mrs. Hibbert; Alex. Parker; Lenfesty & Lentz; and Robert Kilvington.

The first premium of twenty varieties, by H. A. Dreer, consisted of the following:—Cleopatra, Maid of Judah, Brown's Quilled Perfection, Widnall's Reliance, Ne Plus Ultra, Sylph, Elphinstone's Coronation, Conqueror of Europe, Marshal Soult, Wilmer's Ring-leader, Middlesex Rival, Kingscote Rival, Buist's Mrs. Rushton, Sunbury Hero, Lewisham Rival, Brown's Colossus, Suffolk Hero, Horwood's Defiance, *Striata formosissima*, and Mountjoy's Ovid.

The second premium of twenty varieties, by Thomas Hancock, viz: Hero of Tippecanoe, Girling's Suffolk Hero, Lord Morpeth, Maybrow's Rosetta, Green's Wonder, Heiskell's Fanny, Fisherton Champion, Well's Champion, Miss Wilson, Hero of Wakefield, Marchioness of Lansdowne, Queen of Scots, Buist's Mrs. Rushton, Don Carlos, Bowling-Green Rival, Whale's Royal Standard, Horwood's Defiance, Knight's Lady Webster, Cambridge Hero, and Middlesex Rival.

The third premium of twenty varieties, by Robert Buist, viz: Granta, Fowler's Duchess of Richmond, Hero of Tippecanoe, Criterion, Garth's Queen of Beauty, Ansell's Unique, Buist's Mrs. Jones, Independent, Blandina, Yellow Perfection, Thos. Clarkson, Grandis Warminster Rival, Springfield Major, Buist's Magician, Rienzi, Essex Rival, Buist's seedling, 1840, Royal Standard, and Buist's Mrs. Rushton.

Seedling dahlias, by Robert Buist, and Gerhard Schmitz; roses by Peter Mackenzie, thirty varieties; Robert Buist and Mrs. Hibbert; tuberoses by Wm. Graham.

Fancy Designs, Pyramids, &c.:—By Andrew Dryburgh, a very high fancy structure, variously composed of small designs, formed with a profusion of flowers, crowned by an eagle. From Wm. Norris, by Joseph Cook, gardener, a very neat model of a locomotive, of exact proportions, enveloped in flowers appropriately arranged—much admired. By John Sherwood, a pyramid of flowers, some ten feet in height, advantageously constructed, finished by a floral star of the first magnitude, rayed with thirteen smaller ones, corresponding with the thirteen primitive states.

From Mrs. Rowland, by Alex. Cale, gardener, a large tastefully arranged pyramid, formed of the choicest flowers, standing upon a beautiful rustic flower stand; and two handsomely constructed basket bouquets. By Jonathan Tyson, Abington, Pa., a floral model of a pagoda, evincing much taste in its arrangement. From Wm. Camac, by P. Flemming, gardener, a model of a church, which in construction and finish displayed correct taste; and a fine bouquet in a flower stand. From Mrs. Stott, by Wm. Chalmers, gardener, a skeleton model of a temple, variously decorated with flowers, &c.

By James Watt, a skeleton model of a temple some twelve feet in height, arranged with neatness, and upon its spire perched an eagle; also, a beautiful small cone bouquet. By Archibald Ritchie, a miniature flower garden, about ten by twelve feet, scientifically laid out. By H. & A. S. Uter, a fine large cone bouquet, in floral profusion. From the country seat of the late S. Gratz, a small and chaste floral pavilion. By Mrs. Gen. Patterson, a large glass vase of the choicest cut flowers, appropriately and beautifully arranged; also, two smaller of neat construction. From T. C. Percival, a vase of select flowers, displaying in the arrangement much skill and taste.

By Peter Mackenzie, an anchor, enveloped with flowers. Robert Buist, a floral design of a coat of arms, H. S., and two diamond bouquets of dahlias. Miss Percival, two neat basket bouquets of fresh

flowers, much admired for the taste observed in their arrangement. Samuel Maupay, a cone bouquet, in correct taste. From Joshua Longstreth, a range of beautiful bouquets. By Robert Kilvington, an interesting basket bouquet, entirely of indigenous flowers; and several others in basket form, of cut flowers. By Charles Conover, a pair of festoons, of beautiful construction, and a handsome basket bouquet. By S. & H. Cooper, a pair of festoons formed of evergreens, with flowers appropriately interwoven.

Fruits:—One of the finest collections of fruits, was one hundred varieties from the nursery of our correspondent, Mr. A. J. Downing, Newburgh, N. Y. The committee speak in high praise of the specimens, and remark that they have never been surpassed on any former occasion. The following are the names:—

From A. J. Downing & Co., Newburgh, N. Y: Pears—Bartlett, Frederic of Wurtemberg, Capiaumont, Bezi de la Motte. Althorpe Crassane, brown Beurré, Buerré Diel, Easter Buerré, St. Michael or Virgalieu, Buffum, Gansel's Bergamot, Swiss Bergamot, Easter Bergamot, Sylvange Bergamot, Delices d'Ardenpont, Duchess d'Angouleme, Bleeker's Meadow, Napoleon, Wilkinson, Seckel, Fulton, Urbaniste, Henry IV, Louise Bonne (real), Swan's Egg, Passe Colmar, Princess of Orange, Black Pear of Worcester, Rousselette de Rheims, St. Germain, Buerré Blanc, Autumn Bergamot, Angleterre, Gil-o-gil, Beurré Rans, Hericart: Apples—Baldwin, Bedfordshire Foundling, Black gilliflower, English Golden pippin, Cornish Aromatic, English Nonpareil, Domine, English russet, Federal pearmain, Fallowater, Gardener's sweet pearmain, Gravenstein, Flushing Spitzemberg, Fameuse, Grand Sachem, Greenwich, Hawthornden, Zank, Autumn pearmain, Pennock, Holland pippin, Jersey sweeting, Jonathan, Kerry pippin, Killam-Hill, Lady apple, Lemon pippin, Lucombe's seedling, Monstrous pippin, Margil, Norfolk Beautin, Pumpkin sweeting, Priestly, Cumberland, Golden Harvey, Jersey greening, Roe's sweeting, Ross Nonpareil, Red Bellflower, Ribston pippin, Rhode Island greening, Sapson, Scarlet pearmain, Swaar, yellow Bellflower, Williams's Favorite, Summer Sweet Paradise, Winter Sweet Paradise, Siberian Crab, Porter, Beauty of Kent. Plums—Coe's Golden Drop, Coe's late Red, Diamond, late yellow Gage, Purple Gage, Roe's Siamese, Roe's Autumn Gage, Frost plum, Violet Perdrigon, Cox's seedling. Grapes—Catawba, Isabella, Elsinboro'.

By C. S. Langstreth:—Grapes—white Sweetwater, white Greek, Miller Burgundy, black Hamburg, red or rose Burgundy, green and yellow Provence, Chasselas of Fontainbleau, and white Muscat of Alexandria. By James Laws:—Grapes—Hansteretto, purple Frontignac, Royal Chasselas, Muscat of Alexandria, white Frontignac, Columbian, and golden Chasselas. By Mrs. Stott:—Grapes, raised under glass—white Syrian, black Hamburg, and white Muscat of Alexandria. By William Graham:—Grapes—black Hamburg, Native, Isabella, and Catawba. Lemons—St. Helena.

By John B. Smith:—Pears—butter, Seckel and Doyenne. Strawberries—monthly Alpine and filberts. From the country seat of the late S. Gratz:—Pears—Seckel; apples, quinces, figs, two varieties; nutmeg melons and filberts. By Robert Kilvington:—Pears—Seckel, French Bergamot and seedling; berberries, Japan quinces, and an apple of the second crop this season. By George Sibbald:—Pears—Seckel and Chisel; and papaws, the fruit of *Anona tribola*. By Horace Binney:—Pears—Seckel; apples—pound variety; and nutmeg melons.

Besides these contributions, there were numerous specimens of Chasselas, Hamburgh and native grapes, from more than twenty-five exhibitors; also a great variety of peaches, walnuts, &c., from numerous individuals.

Vegetables:—The annual display of the society has always been remarkable for the superior quality of the vegetables exhibited. The efforts of the society to create an interest in this department of gardening are highly commendable, and should be seconded by every other society in the country. The committee truly remark, that "the remarkable quality, and size, of the vegetables presented were strongly indicative of a very productive season, for objects in this department of horticulture. The spirit of emulation evinced by contributors, in their endeavors to outvie, cannot but result beneficially; in some instances, the variety of individual collections, was so extensive as almost to embrace the whole catalogue of esculents.

By S. & H. Cooper:—Potatoes, of early white, Mercer, black, and ash-leaved kidney varieties; onions—Strausburg and brown Portugal from seed; cabbage—red, Savoy, and drumhead; carrots; lettuce; endive; salsify; beets—turnip, sugar and long; pumpkins—long necked and inammoth; citron preserving melons; tomatoes, egg and plum; egg plants; squashes, round and long; red pippins; parsnips; radishes, four varieties; mangel wurtzel; horse-radish; turnips, red and white topped; ruta baga; celery; Swiss chard; spinach; cucumbers; peas; okra; nasturtians; Lima beans; corn; balsam apples, thyme, sweet Basil, and sage.

By Jacob Engleman:—potatoes—Mercer, Calimanca, white Nova Scotia, late blueskin, and Rohan; onions—one string, eight feet, containing one hundred and forty-eight; cabbage—drumhead and red; lettuce—Palantine head; salsify; cucumbers—white spined and four pickling varieties; beans—Lima, long and short pod, and Valentine; green peas; tomatoes, and white hominy corn.

By Albinus Felton:—potatoes; onions, white and red; cabbage—Savoy and drumhead; brocoli; lettuce—royal cabbage and Cos; endive; tomatoes, four varieties; turnips, white and blue topped; egg plants—dark purple and long purple; cucumbers; radishes; kohlrabi; beans; Swiss chard; and parsley.

Upwards of forty other members contributed a great variety of vegetables, but which we have not room to enumerate.

The following are the reports of the committee awarding premiums:—

The premiums on this occasion were awarded as follows, viz:—

PLANTS AND FLOWERS.—For the best twenty varieties of dahlias, to Henry A. Dreer.

For the next best twenty varieties of dahlias, to Thomas Hancock, Burlington, N. J.

For the next best twenty varieties of dahlias, to Robert Buist.

For the next best display of dahlias, to Henry A. Dreer.

For the next best display of dahlias, to George C. Thorburn, N. Y.

For the best American seedling self-colored dahlia, to R. Buist.

For the next best American seedling self-colored dahlia, Lady Washington, to Gerard Schmitz.

For the best design of cut flowers, to A. Dryburgh.

For the next best design of cut flowers, to Joseph Cook, gardener to William Norris.

For the next best design of cut flowers, to John Sherwood.

For the best pair of wreaths, to Charles Conover, gardener to I. C. Jones.

For the next best pair of wreaths, to S. & H. Cooper.

For the best bouquet, to Samuel Maupay.

For the next best bouquet, to P. Flemming, gardener to W. Camac.

Your committee also recommend the following honorary premiums to be awarded by the Society, viz:—

Eight dollars to Archibald Ritchie, for a fine and showy model of a flower garden.

Eight dollars to William Chalmers, sen., gardener to Mrs. Stott, for a handsome model of a temple.

Eight dollars to P. Flemming, for the very pretty and neat model of a church.

Seven dollars to James Watt, for the model of a temple.

Six dollars to Alexander Caie, gardener to Mrs. Rowland, for a fine pyramid of flowers.

Five dollars to H. & A. S. Huber, for a cone of flowers.

Four dollars to J. Tyson, for a pagoda.

Three dollars to Philip Reilly, gardener to Miss Gratz, for a model of a temple.

Three dollars to Peter Mackenzie, for an anchor of flowers, &c.

Three dollars to Miss Percival, R. Kilvington, and C. Conover, for basket bouquets.

Your committee would be wanting in their duty, did they not acknowledge, with much pleasure, the handsome bouquets presented by Mrs. Gen. Patterson, Mrs. Rowland, Joshua Longstreth, and William Camac, Esqrs.,—as also, the cut flowers from the gardens of Mrs. Stott and Mrs. Hibbert, and Messrs. Longstreth, Buist, Kilvington, Dryburgh, and Dreer, with which the rooms were decorated.

FRUIT.—The Committee on Fruits report, that, after a careful and delicate attention to the merits of the respective articles in competition in their department, they have awarded the following premiums, viz:—

For Foreign Grapes raised in the open air.

For the best black Hamburg, four bunches, to C. S. Longstreth.

For the best Hansteretto, four bunches, to James Laws.

For the best Chasselas, four bunches, to C. S. Longstreth.

For the best white Frontignac, four bunches, to James Laws.

For the best of another variety, four bunches, to James Laws.

For the best foreign grapes, raised under glass, viz., white Syrian, black Hamburg, and white Muscat of Alexandria, to William Chalmers, gardener to Mrs. Stott.

For Native Grapes.

For the best Isabella, six bunches, to William Graham.

For the next best Isabella, six bunches, to Benj. E. Valentine.

For the best Bland, or Powell, six bunches, to Benj. E. Valentine.

For the next best Bland, or Powell, six bunches, to Wm. Savery.

For the best Catawba, six bunches, to Isaac Meyer.

For the next best Catawba, six bunches, to Isaac Koons.

For the best of another variety, six bunches, to T. Hilyard.

For the best peck of peaches, Lemon Cling, contributor not known.

For the best two dozen peaches, to Wm. M. Alburger.

For the best bushel of seedling peaches, to George Thomas.

For the best peck of Seckel pears, to John B. Smith.

For the best peck of Butter pears, to John B. Smith.

For the best peck of another variety of pears, Doyenne, to John B. Smith.

For the best apples, one peck, to Josiah Buzhy.

For the next best apples, one peck, to Geo. Robinson, gardener to H. Binney.

For the best bushel of apples, to Charles Haines.

For the best watermelons, to Jacob Amon.

For the next best watermelons, to J. J. Hatch.

For the best citron melons, to George Robinson, gardener to H. Binney.

For the best quinces, a half peck, to Edward Smith.

And your committee most respectfully call the attention of the Society to the beautiful and very interesting display of fruits presented at the exhibition by Messrs. A. J. Downing & Co., of Newburgh, N. Y., comprising a great variety of the most choice and rare kinds of pears, apples, &c., all of which were arranged with the greatest care and attention, and are well deserving an honorary premium of ten dollars.

The display of fruits generally, the committee regret, was not as rich as usual, owing to a variety of unforeseen causes, yet was calculated to incite the admiration and tempt the palate of numerous visitors.

And your committee notice with pleasure the introduction of the Alpine strawberry and filberts, which, being rather out of the common course, they hope will excite proper attention on the part of those disposed to cultivate them. For the first, they are indebted to the assiduous attention of John B. Smith, Esq., and the latter also, from the same source, and the Girard bank.

VEGETABLES.—The Committee on Vegetables report, that they have decided, upon due inspection of the objects presented by competitors, in awarding the premiums offered by the society, as follows:—

For the best potatoes, one bushel of the Mercer, to S. Gratz.

For the best sweet potatoes, one bushel, to Jacob Amon.

For the best onions, four dozen, to H. & A. S. Uber.

For the best cabbage, six heads, to S. & H. Cooper.

For the next best cabbage, six heads, to George Esher.

For the best red cabbage, six heads, to George Esher.

The red cabbage exhibited by George Roessler, would have been entitled to the premium, had there been the requisite quantity, being but four heads, for which, however, the committee award an honorary premium of two dollars.

For the best carrots, field culture, two dozen, to Geo. Robinson, gardener to H. Binney.

For the best lettuce, six heads, to Albinus Felton.

For the best endive, blanched, six heads, to George Esher.

An honorary premium of two dollars to Win. Chalmers, Sen., for a new variety of endive, raised from seed from Bremen, presented by the society.

For the best salsify, two dozen, to Jacob Engleman.

For the best display of vegetables, a premium of two dollars, to S. & H. Cooper.

For the next best display of vegetables, a premium of two dollars, to Jacob Engleman.

The committee deem the following contributors, each, fully entitled to an honorary premium of two dollars, for the fine specimens of articles specified.

To James Watt, for sweet potatoes, grown in Pennsylvania.

To Jacob Engleman, for egg plants.

To David Comfort, for Valparaiso squash.

To Edward Streinback, for sugar beet,

To Samuel M. Cohen, for a display of tomatoes.

To S. & H. Cooper, for a display of potatoes.

To Jacob Engleman, for a display of potatoes.

To Jeremiah Comfort, of Montgomery Co., for the best display of honey.

Meeting, Oct. 20th, 1840.—A stated meeting was held this evening, and the President took the chair, and expressed his acknowledgement for the honor conferred upon him by a re-election.

The committee, to whom was referred the subject of procuring more suitable accommodations for the Society, submitted a report of their proceedings, and offered some resolutions relative to the same. These resolutions provide that a committee of fifteen be appointed, to open a subscription for one thousand shares of stock, of fifty dollars each, for the purpose of creating a fund to erect a hall for the permanent accommodation of the Society, and that the committee wait upon every member of the society, for the subscription of one share only.

A communication was read, offering a site for the proposed hall.

The following objects were exhibited:—

Plants.—From Robert Buist, *Ardisia crenulata*, *A. serratifolia*, *Asclepias curassavica*, *Begonia Sellowii*, *Cròwea saligna*, *Echeveria grandiflora*, *Eupacris impressa*, *Erica curvispora rubra*, *Gardoquia Hookeri*, *Jasminum grandiflorum*, *Lechenaúlia formosa*, *Metrosideros multiflora*, *Olea fragrans*, *Oxalis Bowiei*, *Salvia patens*, *Sedum Sieboldii*, *Strelitzia reginae*, *Thunbergia grandiflora*, and *chrysanthema* of varieties, *Admiration*, *Compactum*, *Conqueror*, *Conspicuum*, *Queen*, *Triumphant* and *Victory*, a bouquet, and a stand of cut dahlias.

By Peter Mackenzie, cut dahlias, fine specimens of about thirty choice varieties.

Bouquets.—By Joseph Cook, Wm. Chalmers, Sen., Robert Kilvington, and Samuel S. Richie.

Fruits.—By Robert Kilvington, a delicious dish of strawberries.

Vegetables.—By Jacob Engleman, Cauliflower Brocoli, Lettuce of yellow Butterhead, Palantine, and white Cos kinds, Cabbage of the Drumhead, curled Savoy, and red pickling; broad-leaved and curled Endive; red Russia and white Celery; Tomatoes, orange Carrots, and Salsify. By George Robinson, gardener to H. Binney, fine heads of brocoli. (*Society's Report.*)

ART. II. Massachusetts Horticultural Society.

Saturday, Oct. 31.—Exhibited. Fruits:—From the President, handsome specimens of *Passe Colmar*, *Beurré d'Arenburg*, and *Beurré Diel* pears. From John Prince, very large *Marie Louise*,

and Urbaniste pears. From C. Newhall, Dorchester, Bleeker's Meadow, Dix, and Wilkinson pears, the two latter very superior; also, beautiful Gravenstein apples. From Joseph Balch, Roxbury, grapes, from vines received from France, without name; open air cultivation, and very fair.

Nov. 7th.—An adjourned meeting from October 24th; the President in the chair. A committee of three was chosen, to report upon the expediency of awarding medals in place of money, for premiums. Messrs. C. M. Hovey, Jos. Stickney, and Joseph Breck were appointed the committee, to report at the stated meeting in December.

Mr. Francis Bowman, of Cambridgeport, was admitted a subscription member.

Nov. 14th.—*Exhibited.* Fruits:—From R. Manning, Van Mons's No. 70, Bishop's Thumb, Princess d'Orange, Winter Nelis, and Beurré Duval pears, the latter a very fine variety: Bishop's Thumb is also a superior pear. From the President, large and beautiful specimens of the Columbian, Beurré d'Arenburg, Passe Colmar, and Burgomaster pears. The Columbian is a large, showy, and exceedingly fine November pear; the Beurré d'Arenburg will rank with the very best. From Dr. E. Wight, Boston, red apples. From William Oakes, Ipswich, fine specimens of the Minister apple, from the original tree; this variety is not only an exceedingly beautiful fruit, but possesses first rate qualities. From Hon. E. Vose, King of the pippin apples. From J. W. Scudder, Barnstable, ripe cranberries, together with a specimen of cranberry jam and jelly, both well prepared, and of fine appearance. The cranberries were very large, deep crimson, and ripe.

Vegetables:—From C. P. Bosson, thirty-one varieties of turnips, raised from seed received from Scotland last spring. Mr. Bosson presented seeds to Dr. Holmes, of the *Maine Farmer*, Mr. Drew, of the *Maine Cultivator*, D. Haggerston, gardener to J. P. Cushing, Esq., and some others; the specimens shown were cultivated by Mr. Haggerston. Some of the varieties are new and distinct, and well worth trial; but a majority of them are so near alike, that it would be useless to cultivate them as so many distinct sorts; ten out of the thirty would comprise all the best. The names are as follows:—

Green-top yellow Bullock, Hood's yellow, Lewisham Ox heart, Lawrence's yellow Tankard, Old Scotch yellow, purple-top scarlet, Pomeranian white Globe, green Tankard, Long black, yellow Stone, purple-top Hybrid, Dale's Hybrid, white Flat Winter, Lawson's white Stone, Large Norfolk, Improved yellow Stone, yellow Tankard, red Round, red Globe, green-top yellow, green Round, green-top yellow Ox-heart, purple-top yellow, Flat Dutch, Early Snowball, yellow Maltese, green Globe, yellow Altringham, Pollock's fine green-top, and Early yellow Stone. From I. Davis, Worcester, celery.

Nov. 21st.—*Exhibited.* Fruits:—From Robert Manning, Bonne Louise, and Bishop's Thumb pears. From E. M. Richards, Bonne Louise pears. From B. V. French, Chaumontelle pears. From W. Pratt, Bonne Louise pears. From Capt. DeWolf, Brighton, Monsieur Le Curé, (Burgomaster of Boston,) pears. From A. H. Green, of Worcester, Sweet russett apples, from a seedling tree; this is a very excellent fruit. From E. W. Pike, Exeter, N. H., sweet apples, very large and handsome, and well worthy of cultivation. From W. Oakes, Ipswich, fine specimens of Minister apples, from the original tree.

ART. III. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes, new:				Squashes, per pound:			
Chenangoes, } per barrel,	1 25	1 50		Autumnal Marrow,	1½	2	
} per bushel,	50	75		Winter crookneck,	1	—	
Common, { per barrel, ..	1 00	—		Pumpkins, each,	20	—	
} per bushel, ..	50	—					
Eastports, } per barrel, ..	1 75	2 00					
} per bushel, ..	1 00	—					
Sweet, per bushel,	1 00	—					
Turnips:				<i>Fruits.</i>			
Common, per bushel,	25	37½		Apples, dessert:			
Ruta Baga, per bushel, ...	25	37½		Common, per bushel,	37½	50	
Onions:				Extra, per bushel,	75	1 00	
New white, per bunch,	4	6		Baldwins, per barrel,	1 50	1 75	
Red, per bunch,	4	5		Russets, per barrel,	1 50	1 75	
Yellow, per bushel,	62½	75		Greenings, per barrel	1 50	1 75	
White, per bushel,	75	1 00		Pearmains, per barrel,	2 00	—	
Beets, per bushel,	50	62½		N. Y. Pippins, per barrel,	1 75	2 00	
Carrots, per bushel,	50	—		Sweet, per barrel,	2 00	—	
Parsnips, per bushel,	75	—		Hub'ston Nonsuch, pr bbl.	2 50	—	
Shallots, per pound,	20	—		Spice apples, per barrel, ..	1 50	2 00	
Garlic, per pound,	12½	—		Dried apples, per pound, ..	4	5	
Horseradish, per pound	10	12½		Pears, per half peck:			
				Bleeker's Meadow,	50	—	
<i>Cabbages, Salads, &c.</i>				Chaumontelle,	50	—	
Cabbages, per dozen:				Common,	37	50	
Savoy,	37½	50		St. Michaels, per doz.	—	—	
Drumhead,	50	75		St. Germain, per doz.	75	—	
Red Dutch,	75	—		Brown Beurre, per doz.	75	1 00	
Brocoli, each,	12½	25		Burgomaster, per doz.	50	75	
Cauliflowers, each,	12½	25		St. Michael Archangel, }	50	—	
Celery, per root,	8	12½		per dozen,	—	—	
Lettuce, per head,	6	—		Baking, per bushel,	1 50	2 00	
Tomatoes, per half peck, ...	25	—		Grapes, per pound:			
Cucumbers, (pickled) pr gal.	25	—		Black Hamburg,	37½	—	
Peppers, (pickled) per gallon	37½	—		White Sweetwater,	—	—	
				Malaga,	20	25	
<i>Pot and Sweet Herbs.</i>				Isabella,	—	—	
Parsley, per half peck,	25	—		Quinces, per bushel,	2 00	3 00	
Sage, per pound,	17	20		Pine-apples, each,	—	—	
Marjorum, per bunch,	6	12½		Cranberries, per bushel, ...	1 50	1 75	
Savory, per bunch,	6	12½		Lemons, per dozen,	20	25	
Spearmint, per bunch,	6	—		Oranges, per dozen:			
				Sicily,	25	37½	
				Havana, (sweet),	37½	50	
				Chestnuts, per bushel,	2 75	3 00	
				Walnuts, per bushel,	1 75	2 00	

REMARKS.—The month of November has been one of the most disagreeable which has been experienced for several years. During nearly the whole month, there have been continued rains, and cold northeasterly storms; there have been, also, one or two light falls of snow. The quantity of rain which fell has been stated to be greater than during any month, except one, for twenty-five years, amounting to about ten inches. Luckily, however, the fine weather of October enabled the farmer to prepare his crops for the winter; and, beyond

the unfavorable state of the season, for ploughing, &c., no injury has been experienced from it.

Potatoes have continued to arrive in such quantities, and are re-tailed out from the vessels in such small lots, that the market has become very heavy; prices are not as firm as at our last date: East-ports of prime quality have submitted to a reduction of twenty-five cents or more per barrel, and there is now a larger stock than usual in the market; as long as the weather continues open, the supply will be abundant: Sweet potatoes have been exceedingly plentiful, several lots having been sold during the month; prices low for the lateness of the year. Turnips dull, and prices depressed. Onions remain the same, with light sales. Beets, &c., little heavier. Parsnips are now excellent and abundant.

Cabbages are well supplied; drumheads are large and excellent. Cauliflowers have been more abundant than we have generally found them. Celery good and plentiful. Lettuce comes to hand of very fair size. Tomatoes are raised in green-houses, from roots put into tubs in September. Squashes yet remain nearly the same, with however, a slight advance upon autumnal marrows; those of superior quality command our highest quotations.

The stock of fruit has been large, and, up to this period, fair sales have been effected: apples have been taken for shipment, and prices remain the same; Newton pippins are rather scarce. Of pears there has been a continued supply of several good sorts, in better order than usual at this late period of the year. Grapes, excepting foreign, are all gone, but a few inferior black Hamburgs: Malagas are plentiful, and are selling low, several lots having arrived since our last report. Berberries all gone. Cranberries have risen a shade; large exports have been made. Chestnuts are abundant, and there has been some improvement in prices. Walnuts are lower.—*M. T., Boston, Nov. 27th, 1840.*

HORTICULTURAL MEMORANDA

FOR DECEMBER.

FRUIT DEPARTMENT.

Winter is at length upon us, and has put a stop to nearly all the out-door operations of the gardener. Transplanting cannot now be effected, with any good result, and any thing by chance omitted, had now better remain until April. Too late planting is not attended with any benefit, and there is too much risk about it, to be much practised. If the gardener or cultivator has been attentive, nearly all necessary work will have been completed, and every thing will be in readiness for winter. It is better to finish all operations too soon, than to be too late.

Grape vines, in the green-house or grapery, will now have ripened their wood, and will soon be in readiness for pruning, which should

take place between the 15th and last of the month: let the work be well done, every cut neatly performed, and handsome, straight, firm wood left, cutting away that which is pithy and unripe. If cuttings are wanted, select out the very best, and throw the remainder away. Tie up the shoots, to prevent their being broken or injured.

Strawberry beds should be protected with a very slight covering of coarse manure, or leaves. Old beds will require scarcely any, but young plants should be covered a little deeper.

Raspberry vines should be covered, if not already done.

Fruit trees, particularly young ones, should have a little manure thrown round the stem, and on the surface of the soil, to prevent its continually freezing and thawing in the spring.

Grafts cut now, should be placed away in the cellar, with the lower ends in a box or pot of soil.

FLOWER DEPARTMENT.

Dahlias will probably have been taken up ere this, and properly put away in a suitable place. If they have not been, no time should be lost in doing so.

Tulip and hyacinth beds should have a covering of about four inches of leaves, or coarse manure, to prevent the frost from penetrating too deep.

Perennial plants, such as pinks, foxgloves, &c., should have a slight protection of leaves, &c.

Camellias will need good supplies of water while they are flowering. Every plant should be top-dressed, the leaves well washed, and the stems, if crooked, tied up to a neat stick. The seeds may be planted this month.

Ericas should be carefully watered.

Lechnaultias will also require attention: see that they are not watered too freely, and let them be kept as near the glass as possible.

Geraniums should be placed in an airy situation, and be duly and regularly watered.

Chrysanthemums will now be done flowering, and the plants may be removed to the cellar.

Ranunculuses must have a good protection of leaves and a frame, to keep them well during winter.

Verbenas should be placed on a shelf near the glass, and very sparingly watered.

Cactuses should not be watered oftener than once a week.

Oxalises, sparaxis, &c., which have begun to grow, should be placed in the front shelves, near the glass.

Tree pæonies in pots may be brought into the green-house for early flowering.

Hyacinths, planted in pots in October, may be now brought into the green-house or parlor, and they will grow rapidly.

Amaryllises should be potted now.

Roses, Rhododendrons, and other half hardy plants may be protected in a frame.

White lilies may be potted for forcing, if the roots have not already been planted in the open ground.

Green-house plants of all kinds should be top-dressed, and put in order: all straggling ones tied up to neat green sticks, and all decayed leaves picked off.

LIST OF PLANTS.

In the body of the Magazine, a few errors occur in the spelling of the botanical names, the capitalizing of generic and specific names, their derivation and accentuation: these are all corrected in the following list of plants. The synonyms, in several instances, have also been given, where plants have been incorrectly indicated.

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List of Annual Flowers, with the height and color of each, the habit of their growth, &c. 175

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ably, only varieties of the spe-
cies enumerated above, and
have nearly all been produc-
ed by hybridization, a large
part of them from the Tweed-

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